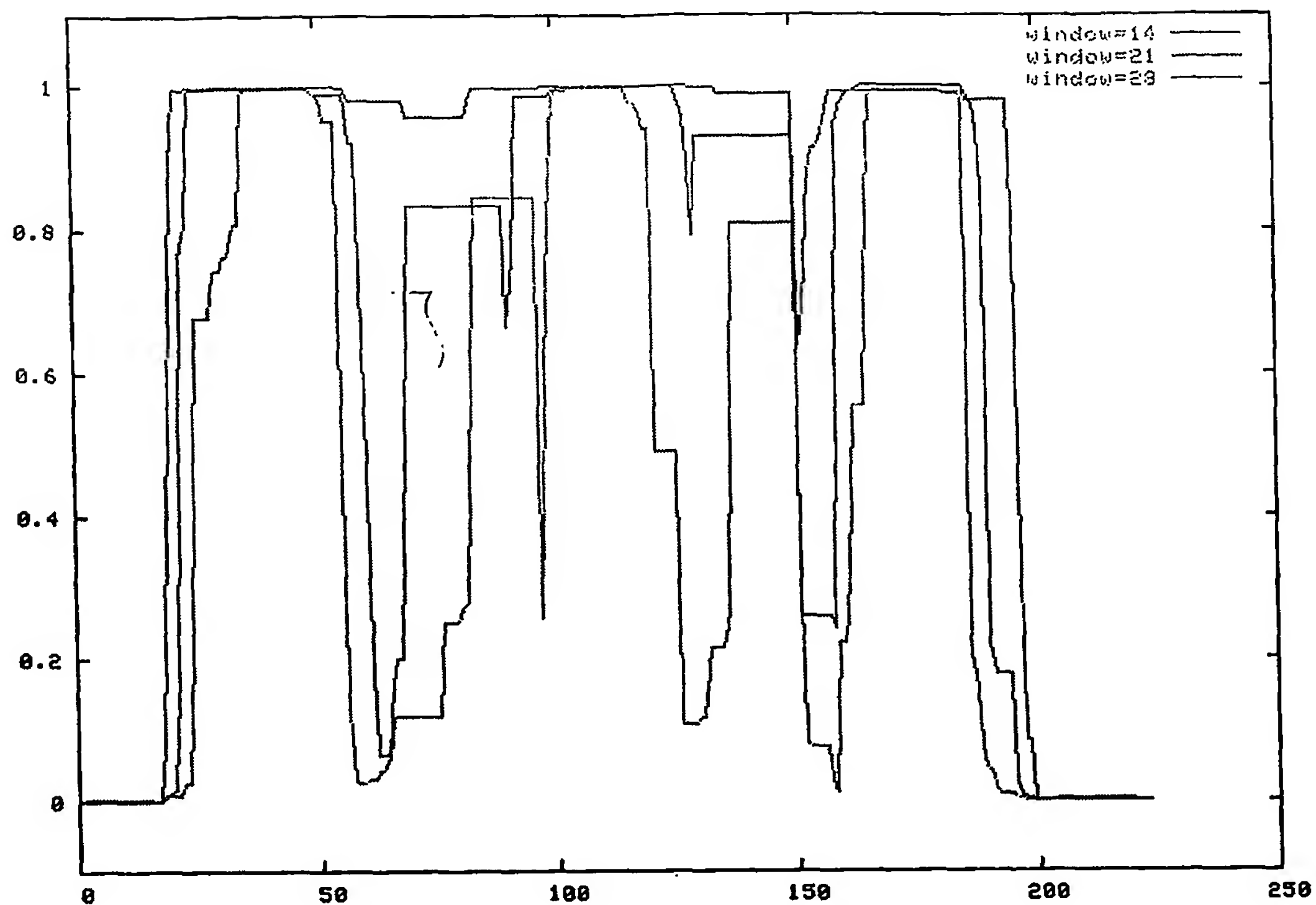
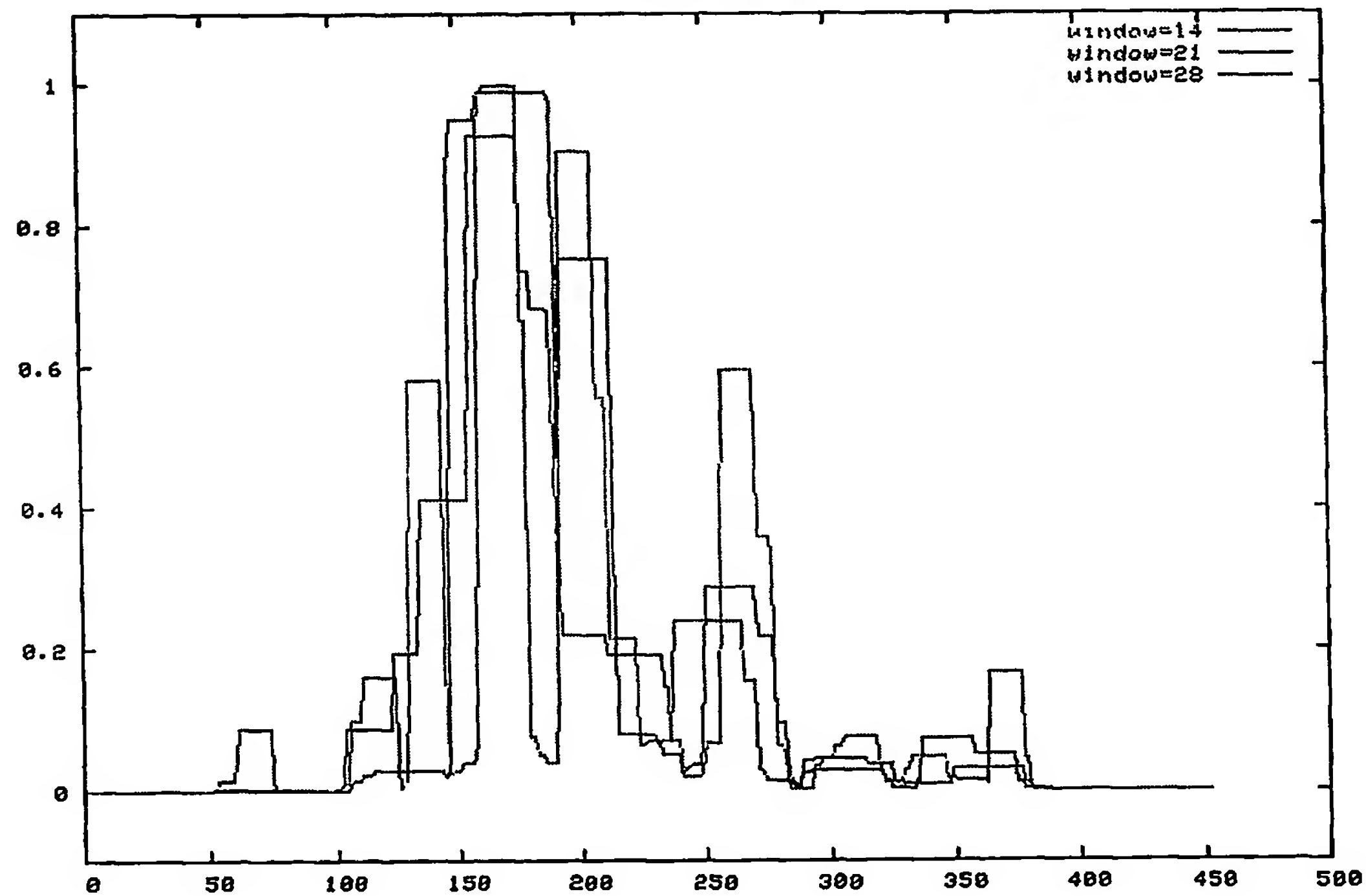


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**FIGURE 1****FIGURE 2**

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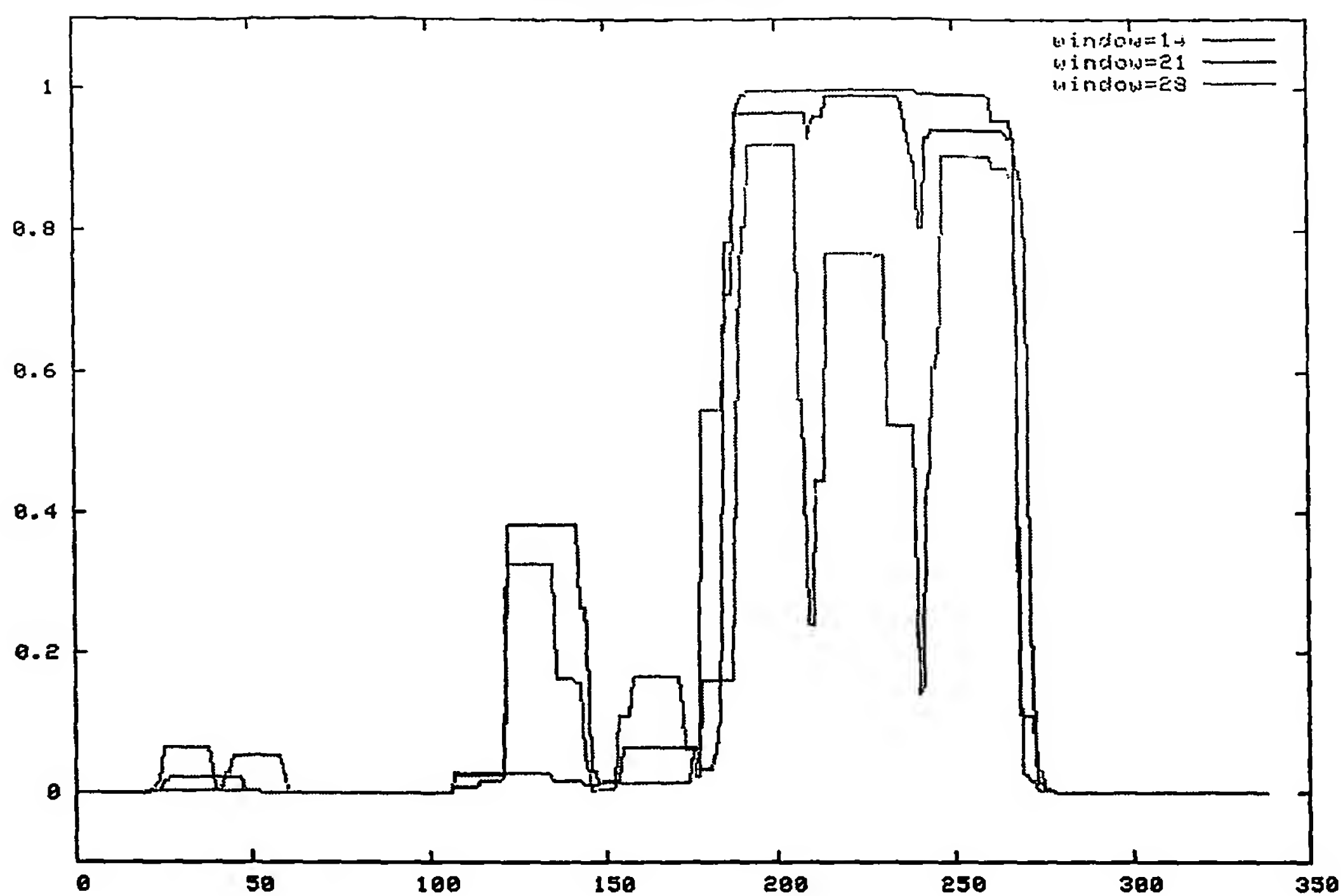
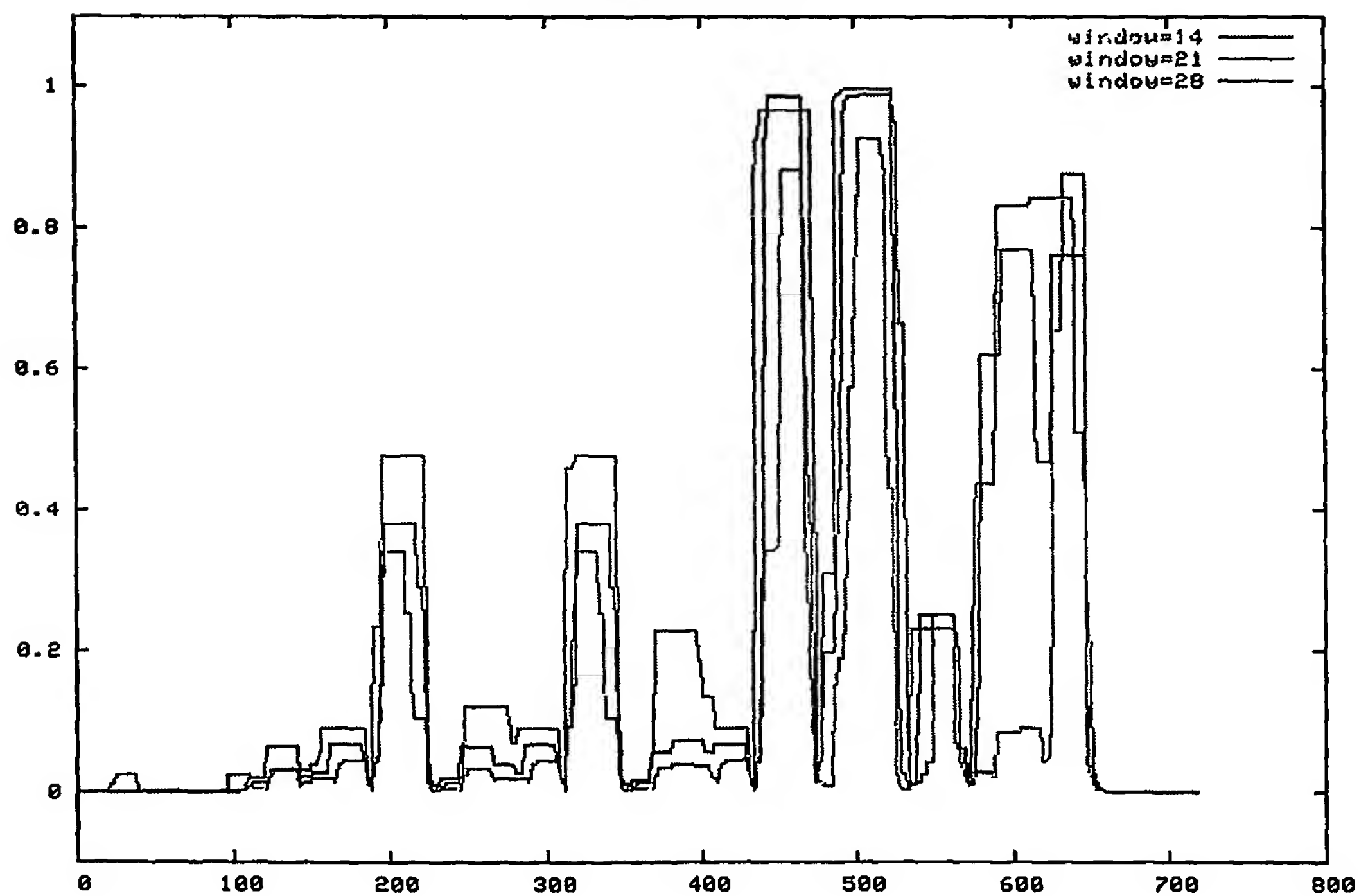
**FIGURE 3****FIGURE 4**

FIGURE 5

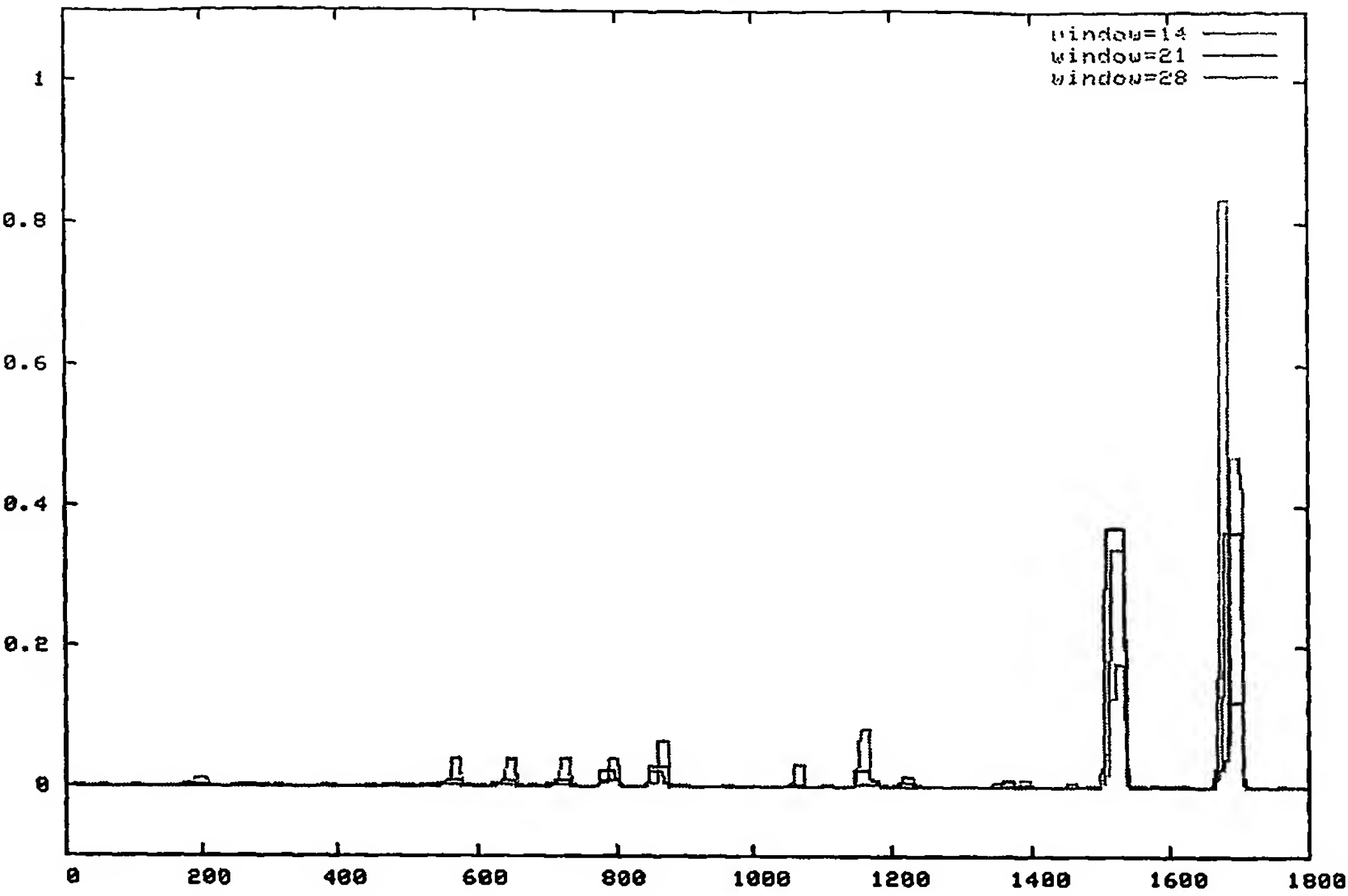
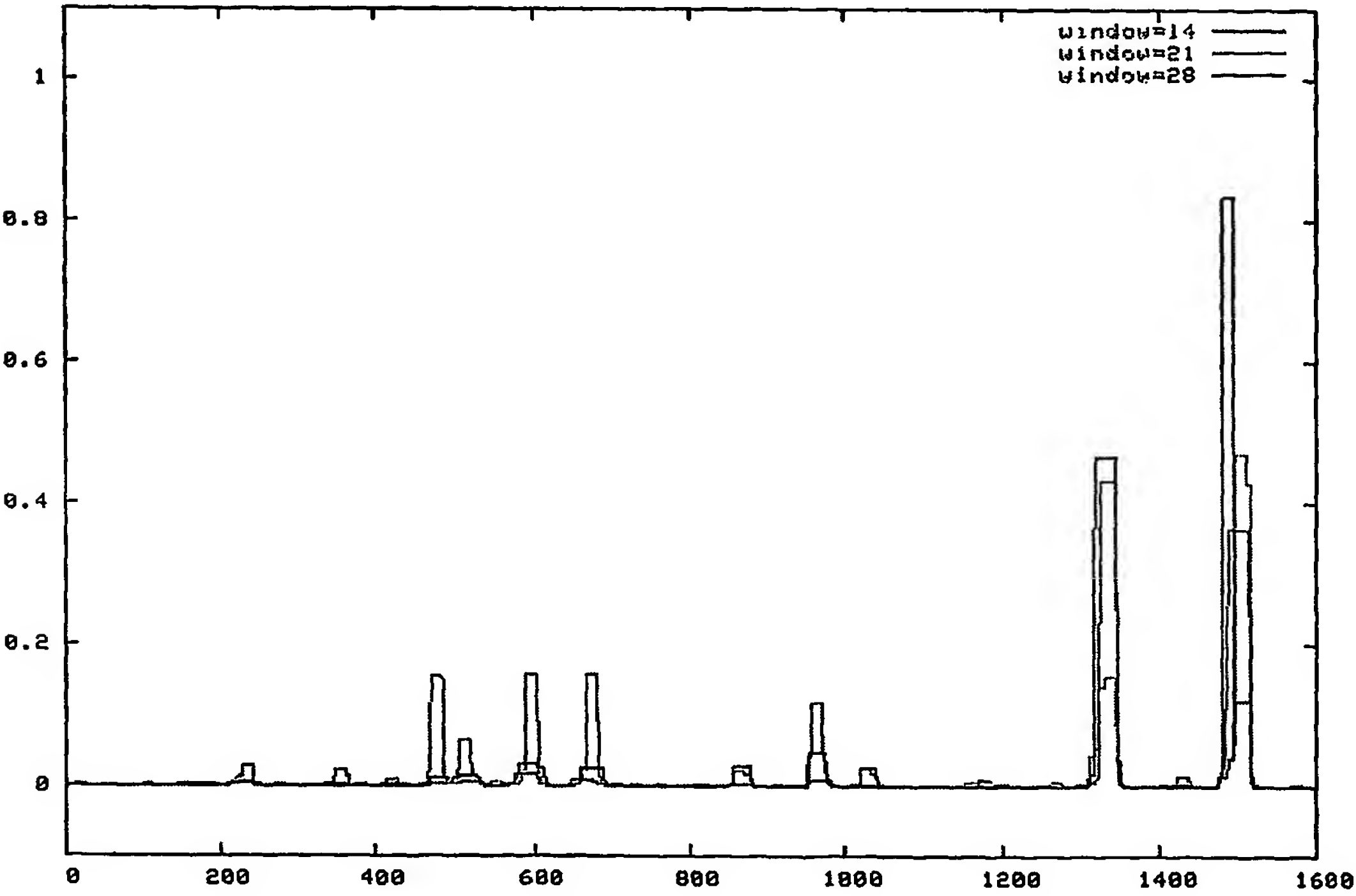
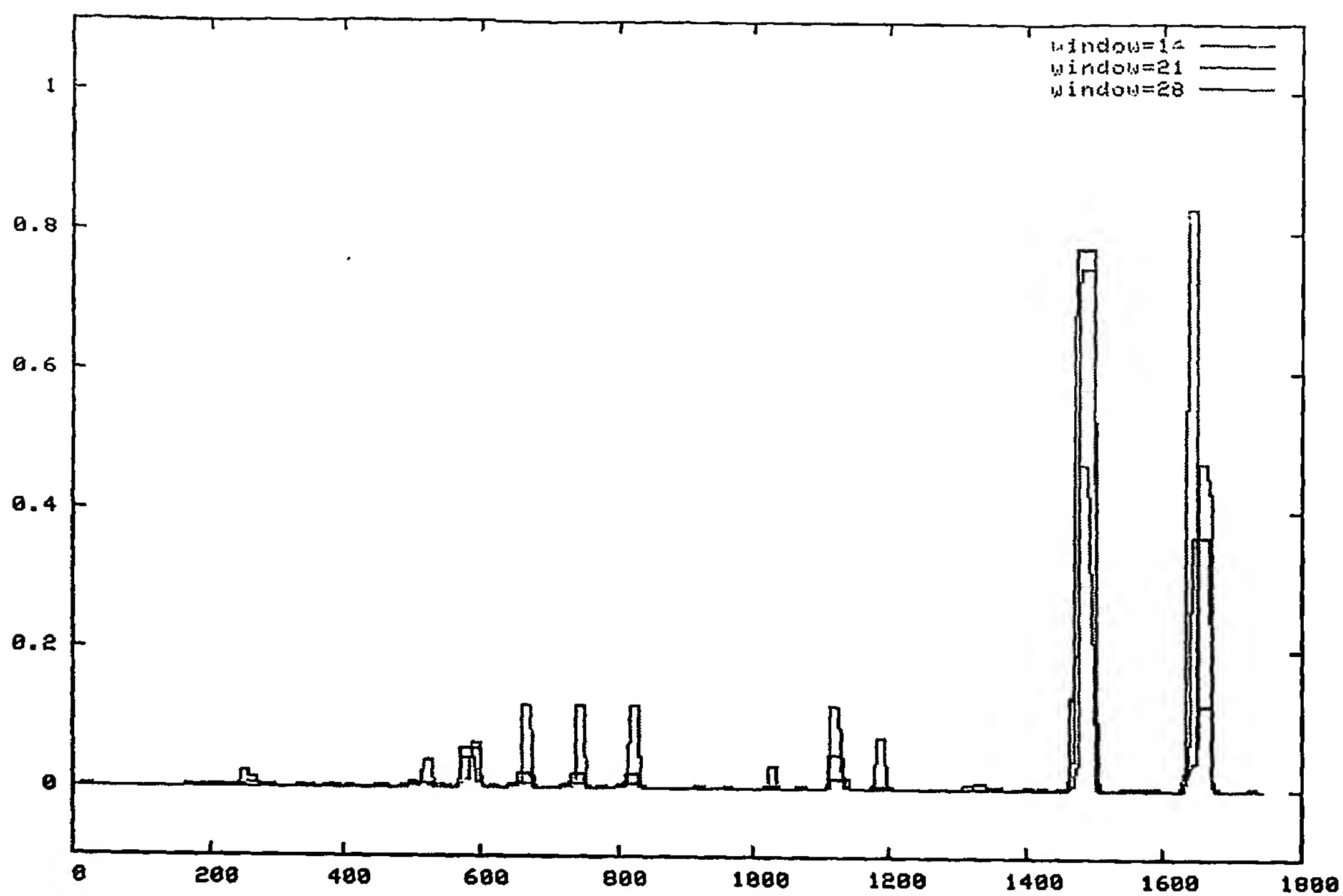
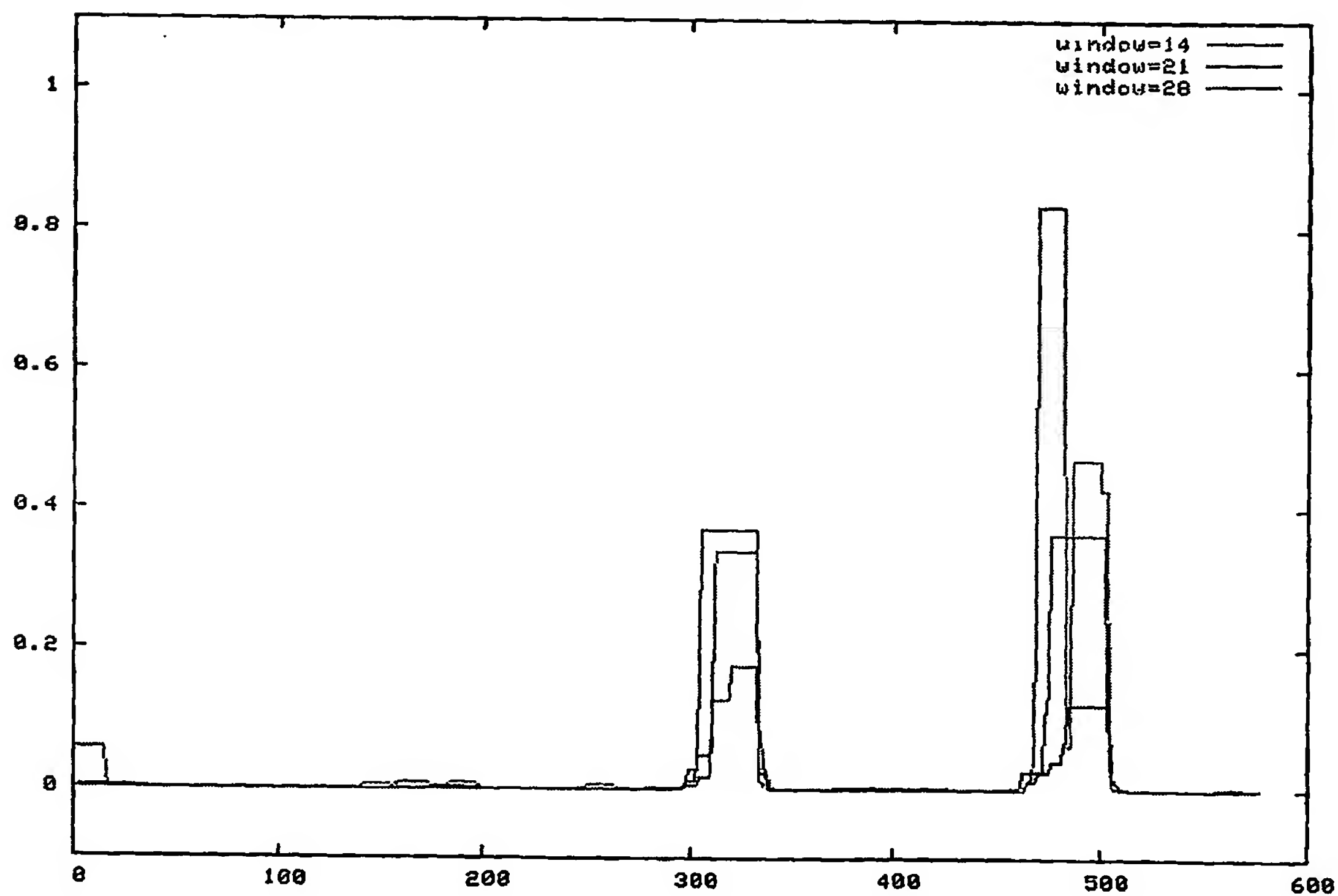


FIGURE 6



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**FIGURE 7****FIGURE 8**

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FIGURE 9

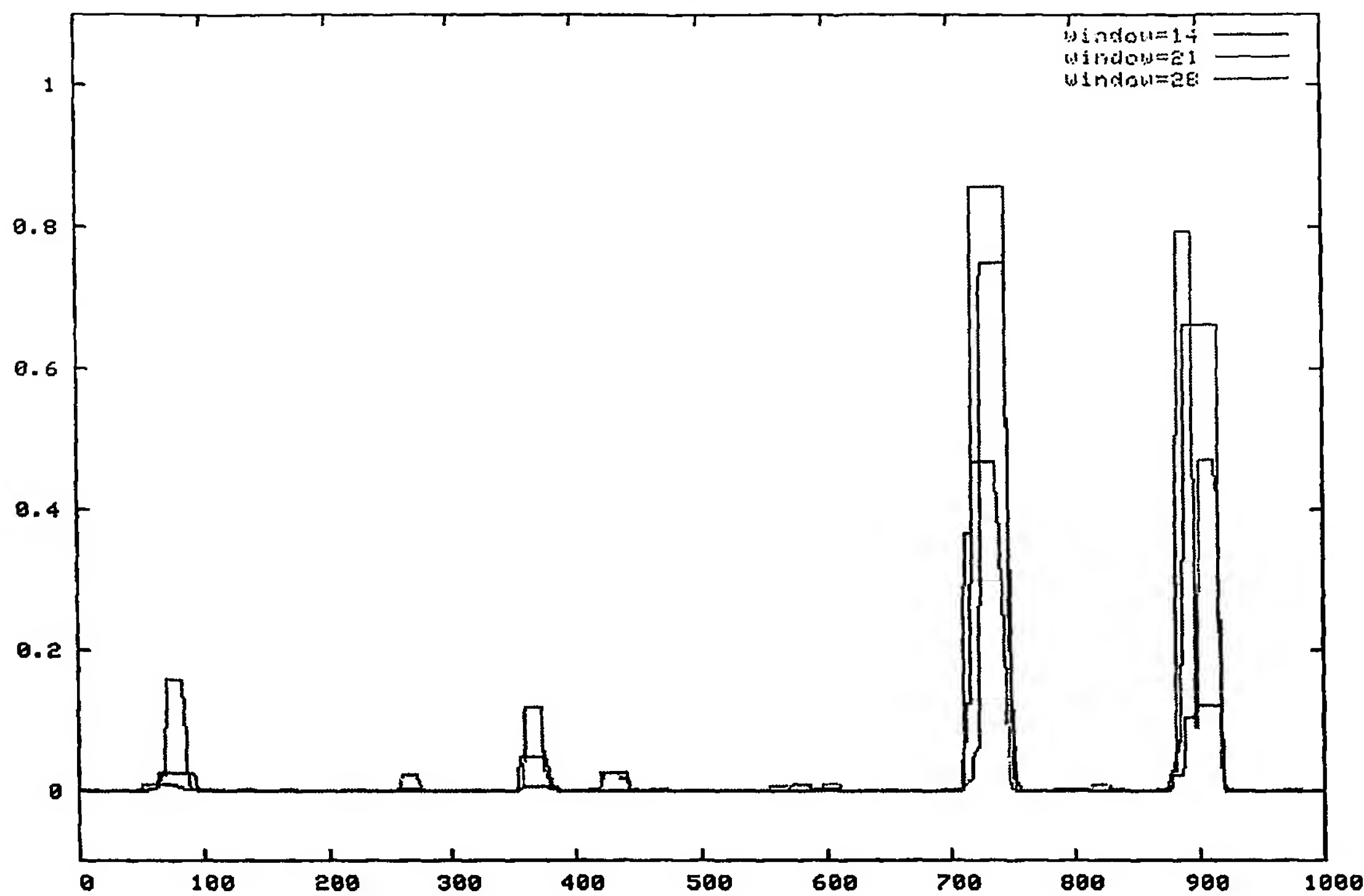
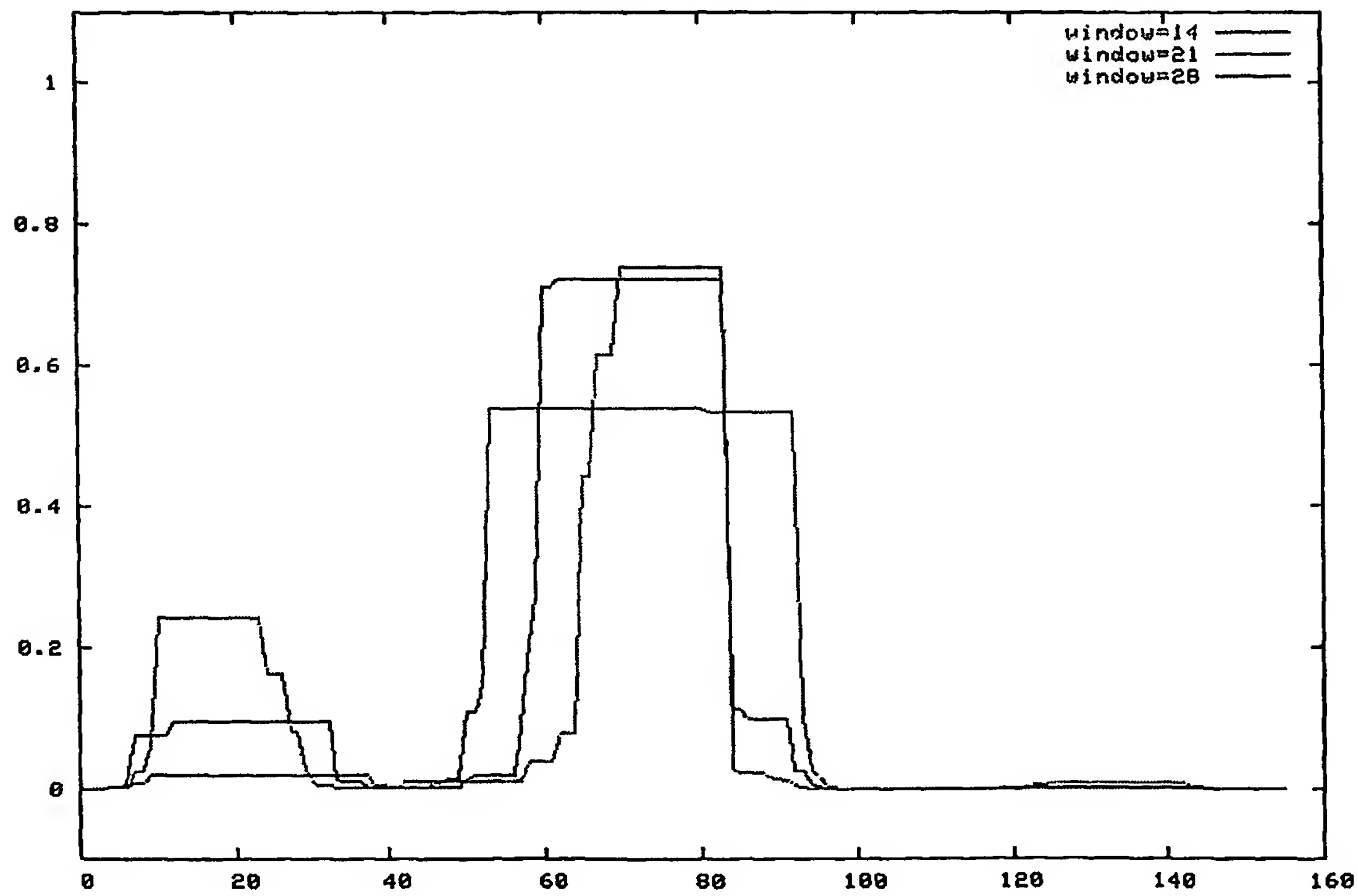


FIGURE 10



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FIGURE 11

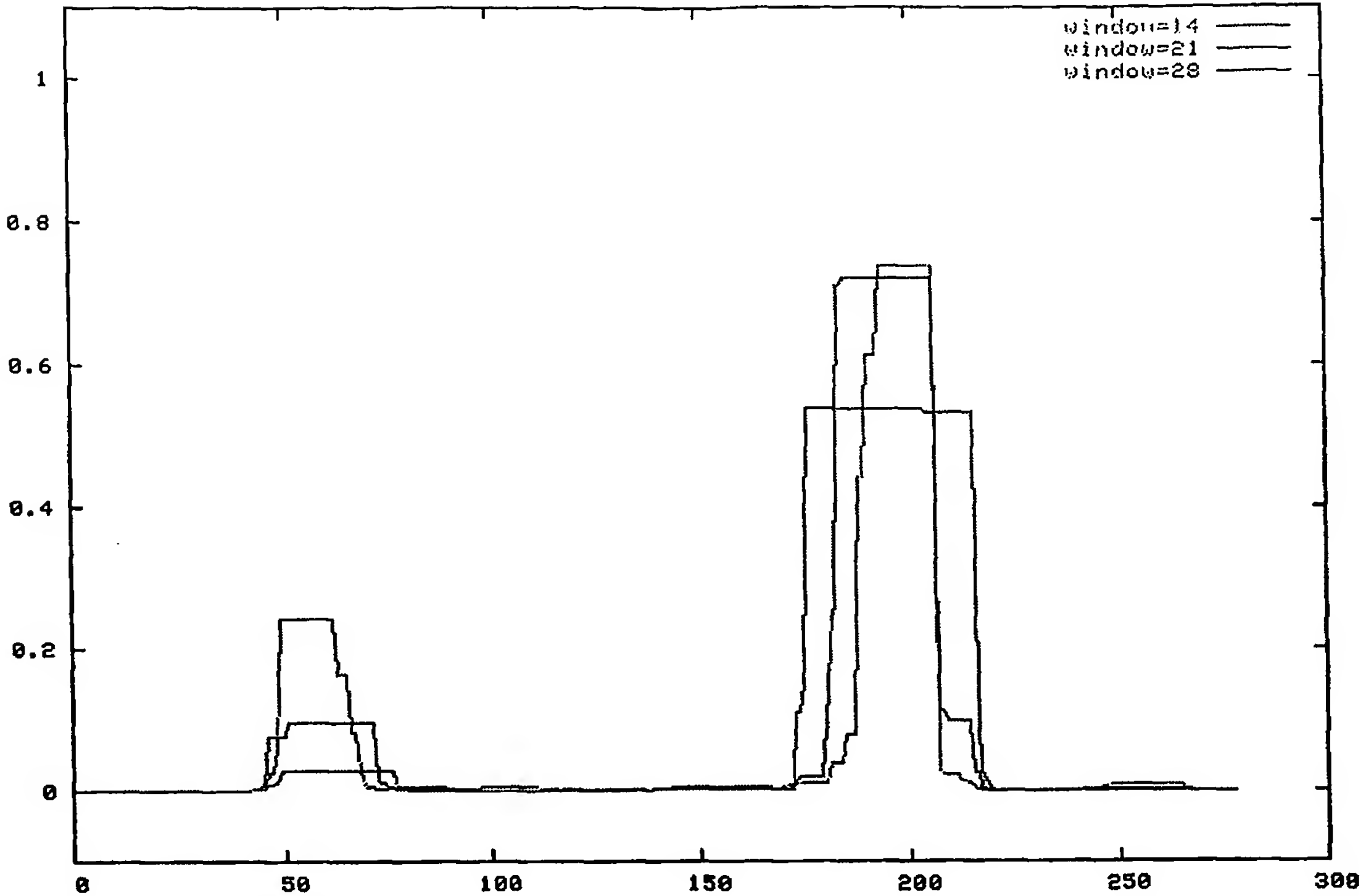
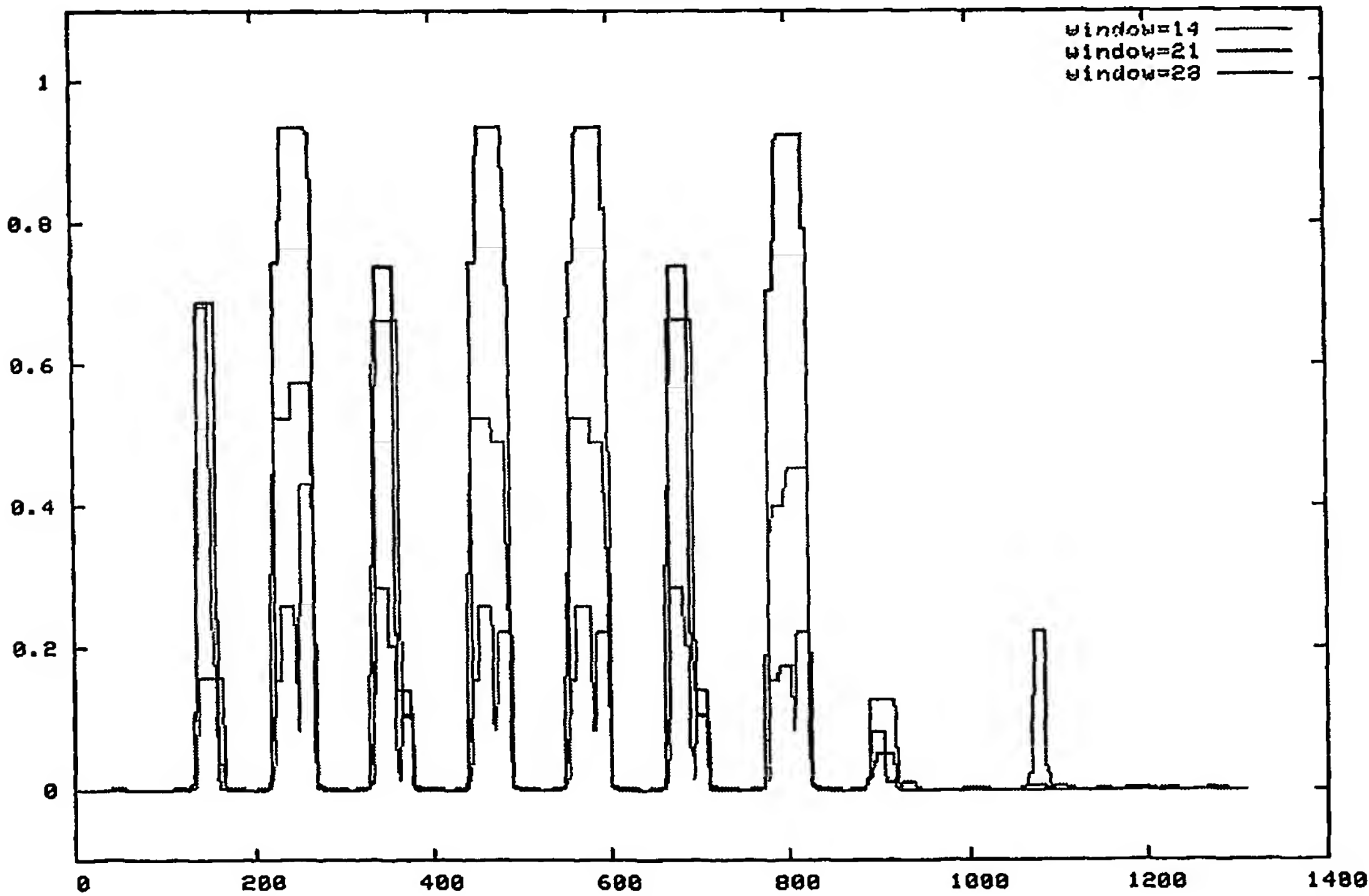


FIGURE 12



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FIGURE 13

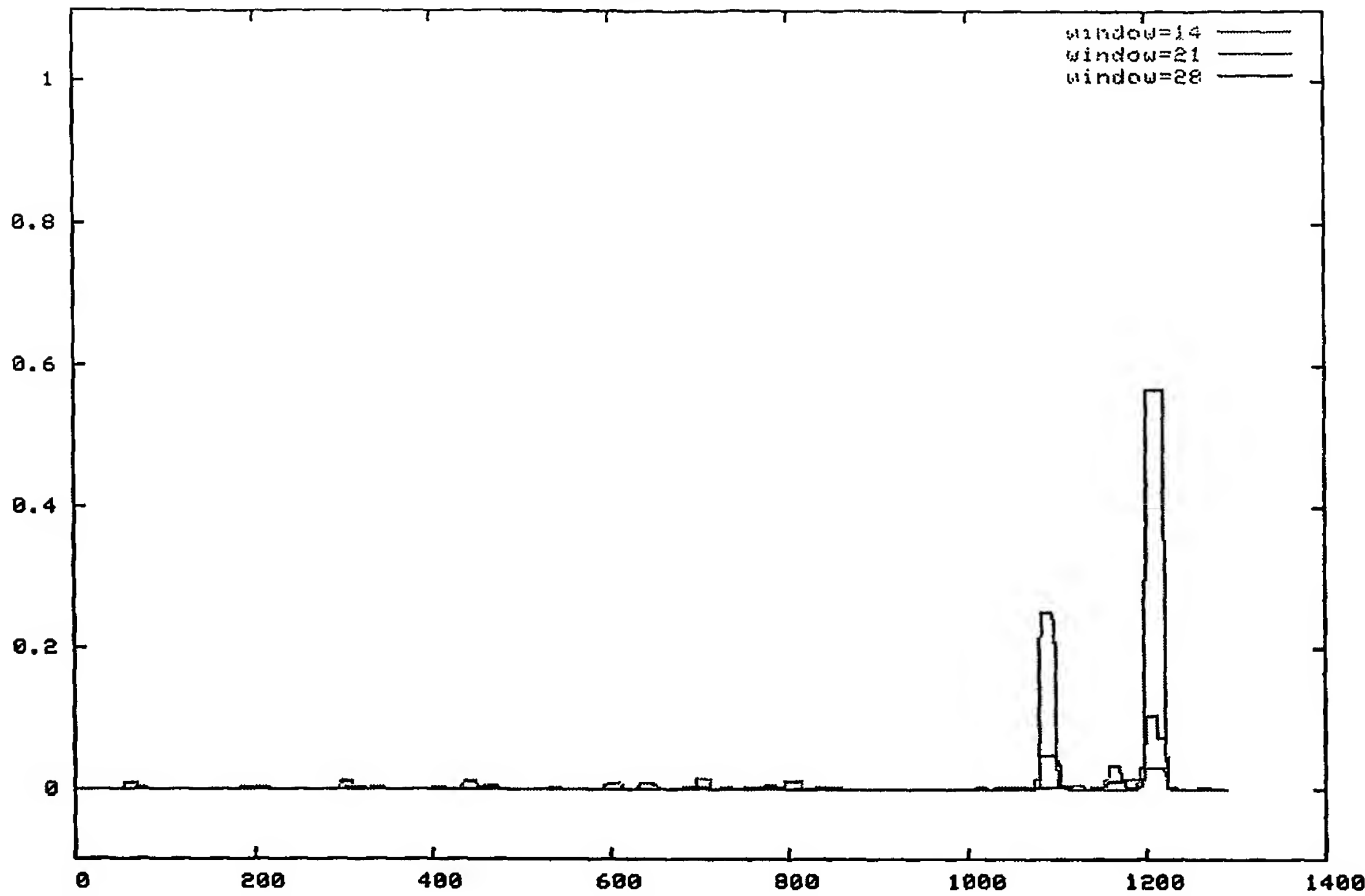
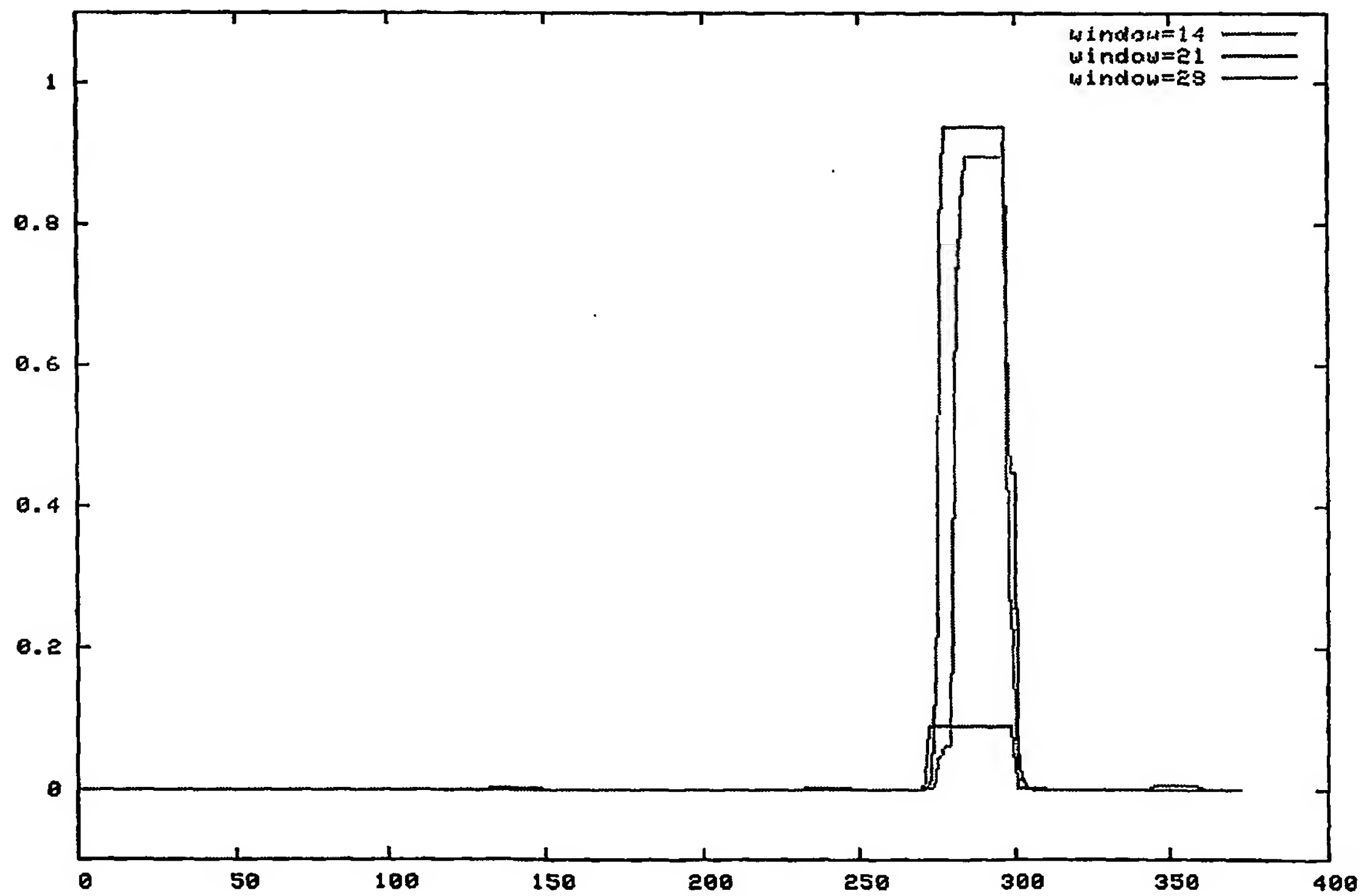


FIGURE 14



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FIGURE 15

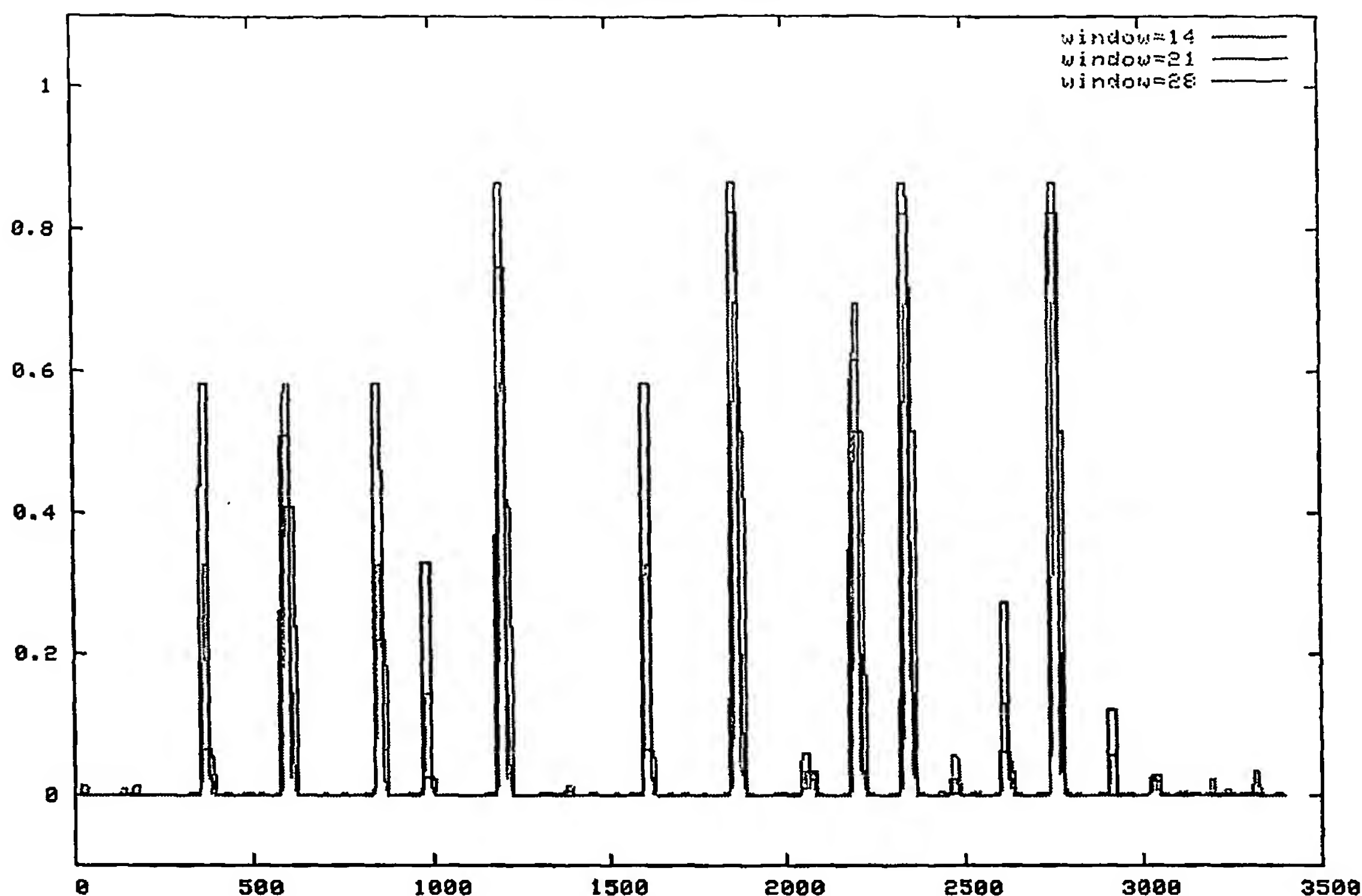


FIGURE 16

ECK1	AGTASAIATASQPQVKTDVMMVSAGAGTENGE SAVSVGTS--FNAGHTVLKAGISADTQSDFGAGVGVGYSE-
EHEC	AGTASAIATASQPQVKTDVMMVSAGAGTENGE SAVSVGTS--FNAGHTVLKAGISADTQSDFGAGVGVGYSE-
EPEC	AGTASAIATASQPQVKTDVMMVSAGAGTENGE SAVSVGTS--FNAGHTVLKAGISADTQSDFGAGVGVGYSE-
EAEC	AGTASAIATASQPQVKAGDFMMMSAGAGTENGE SAVSVGTS--FNAGHTVIKAGVSADTQSDFGAGVEVGYSE-
HAESO	AGIASAVALGMLPQSTAPGKSLVSLGVGHHRGQSATAIGVSS-MSSNGKWVVKGGMSYDTQRHATFGGSVGGFFEN
RALSO	SGIAAATATMTLTPDQVGKSTATGIGSATYKGYQAVALGASA-RISHN-LKAKMGVGYSSSE-GTIVGMEASYQW-
BURFO	AEIAAATATMTLTPDQVGKSTATGIGSATYKGYQAVALEISA-RITON-LKMKAGAGTSSQ-GTIVGLSASYQW-
SAA	AGIAGAMAMTAIPMID-GKQYSFGMAASNRYRDEQAIPAGHIF-RTSEN-TVVRINTSWDTQHGTGVATGMSIGN-
UPEC	GGIASAMAMTGLPQAYTPGASMASIGGGTYNGESAVALEVSM-VSANGRWVYKLOGSTNSQGEYSAAALGAGIQW-
SHIFL	GGIASAMAMTGLPQAYTPGASMASIGGGTYNGESAVALEVSM-VSANGRWVYKLOGSTNSQGEYSAAALGAGIQW-
NADA	QGLAEQAALSGLFQPYNVGRFNVTAAVGGYKSES AVAIGTGFRFTENFAAKAGVAVGTSSGSSAAXHVGVNVEW-
HADA	RELAAQAALNGLFQPYNVGKLNLTAAVGGYKSKTAVAVGTGFRFTENFAAKAGVAVGTSSGSSAAXHVGVNVEW-
ACTAC	NGLASQAALSGLFQPYNVGSLNLSAAVGGYKSKTALAVGSGYRFNQNVAAKAGVAVSTNGGS-ATYNVGLNFEW-
EIBC	RAAQQAALSGLFQPYSVGKFNATAAVGGYSDDQALAVGVGYRFNEQTAAKAGVAFSD-GD--ASWNVGVNFEF-
EIBD	RAAQQAALSGLFQPYSVGKFNATAAVGGYSDDQALAVGVGYRFNEQTAAKAGVAFSD-GD--ASWNVGVNFEF-
EIBF	RAAQQAALSGLFQPYSVGKFNATAAVGGYSDDQALAVGVGYRFNEQTAAKAGVAFSD-GD--ASWNVGVNFEF-
EIBA	RAAQQAALSGLFQPYSVGKFNATAAVGGYSDDQALAVGVGYRFNEQTAAKAGVAFSD-GD--ASWNVGVNFEF-
EIBE	RAAQQAALSGLFQPYSVGKFNATAALGGYSDDQALAVGVGYRFNEQTAAKAGVAFSD-GD--VSYNMVGVNFEF-
USPA2	NEMEAQAALSGLFQPYSVGKFNATAALGGYSGSKSAVAIGAGYRVNPNLAFKAGAAINTSGNKKGSYNIGVNVEF-
YADA	KELASSAALNSLFQPYGVGKVNFTAGVGGYRSSQALAISSGYRVNENVALKAGVAYAGSSD--VMYNASFNIEN-
DSRA	TELAAQSAALSLVQPNGVGKTSVSAVGGYRDKTALAIGVGSRTDRFTAKAGVAFNTYNGG-MSYGASVGYEF-
BRUME	AGAANAALSGLRDNRPGKVSIAATGVGGFKGSTALAAAGIGY-TSKNENARYNV-SVAYNEAGTSWNAGASETLN
BRUSU	AGAANAALSGLRDNRPGKVSIAATGVGGFKGSTALAAAGIGY-TSKNENARYNV-SVAYNEAGTSWNAGASETLN
BRUME2	QAAAIGLAAASLRDNRPGKISAAIGGGFWRGEGAVALLGH-TSEDQRMRSNLS-AATSGGNWGMGAGE SYTEN
BRUSU2	QAAAIGLAAASLRDNRPGKISAAIGGGFWRGEGAVALLGH-TSEDQRMRSNLS-AATSGGNWGMGAGE SYTEN
SINME	QAAAIGLAAASLRFDNEPGKLSVALEGGFWRSEGALAFGAGY-TSEDGRVRANLT-GAAAGGNVGVGAGLSITLN
BRAJA	GGVPLAALASSLQFDPKPKESVSGGFGNEQGSGLAVGLEXY-SYSD-AMRFNAFTAAQQAIGVRAGASWTLN





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FIGURE 17

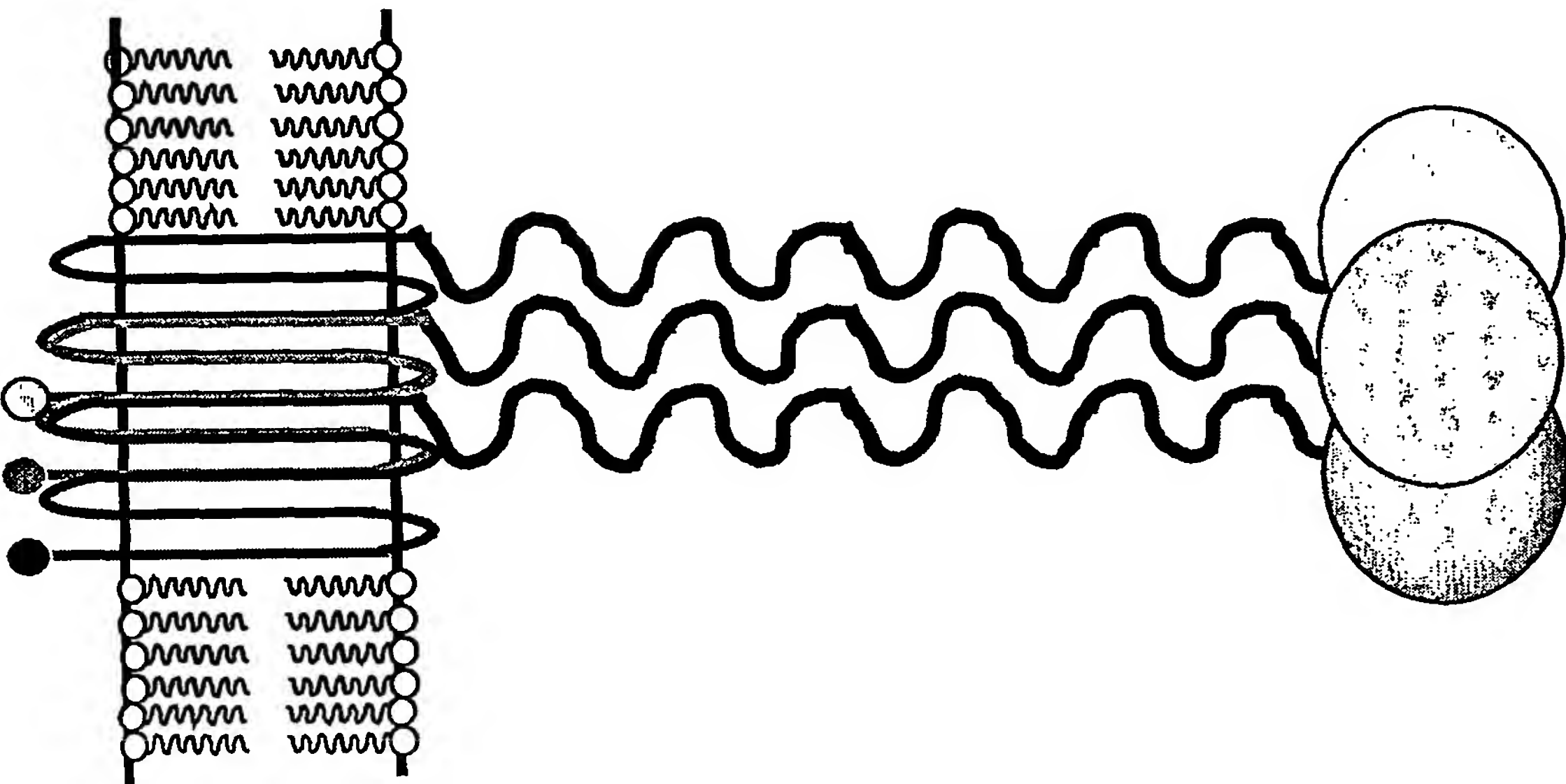
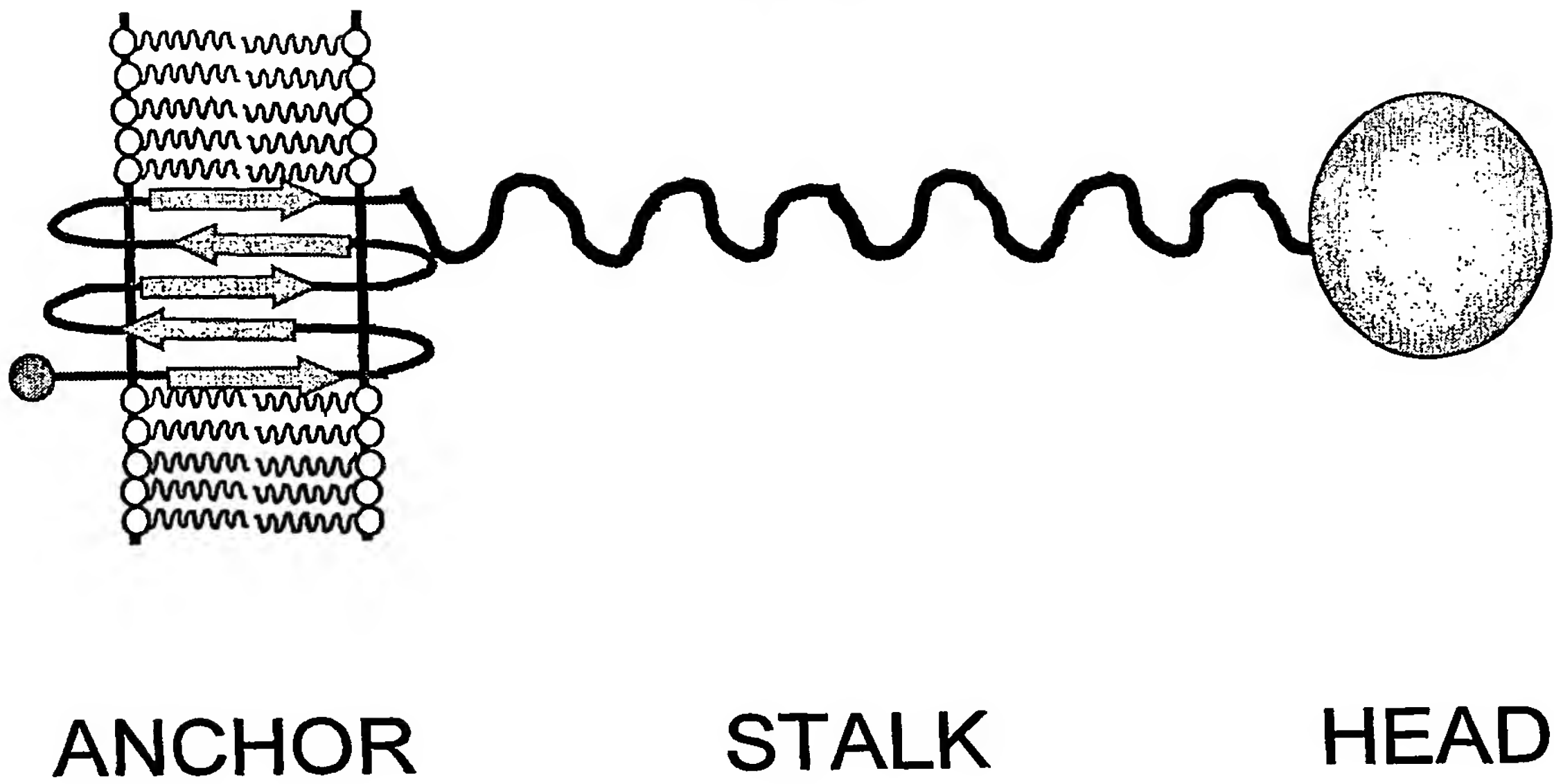


FIGURE 20

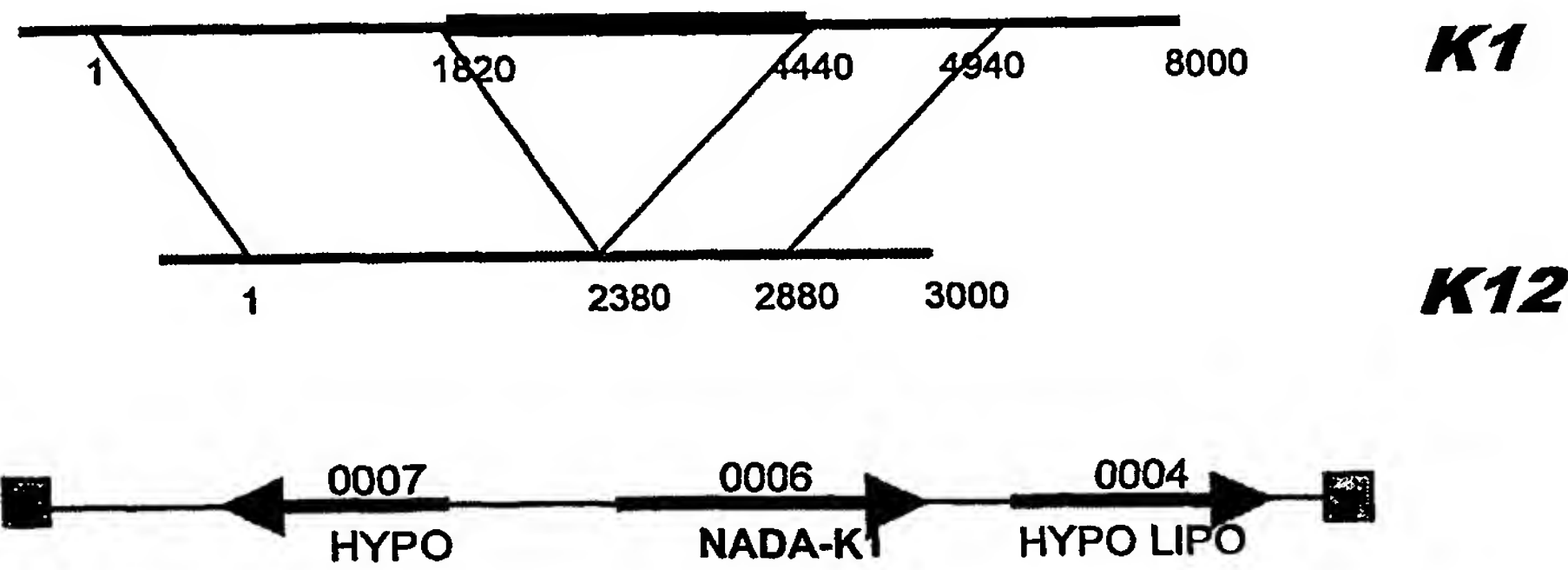


FIGURE 18

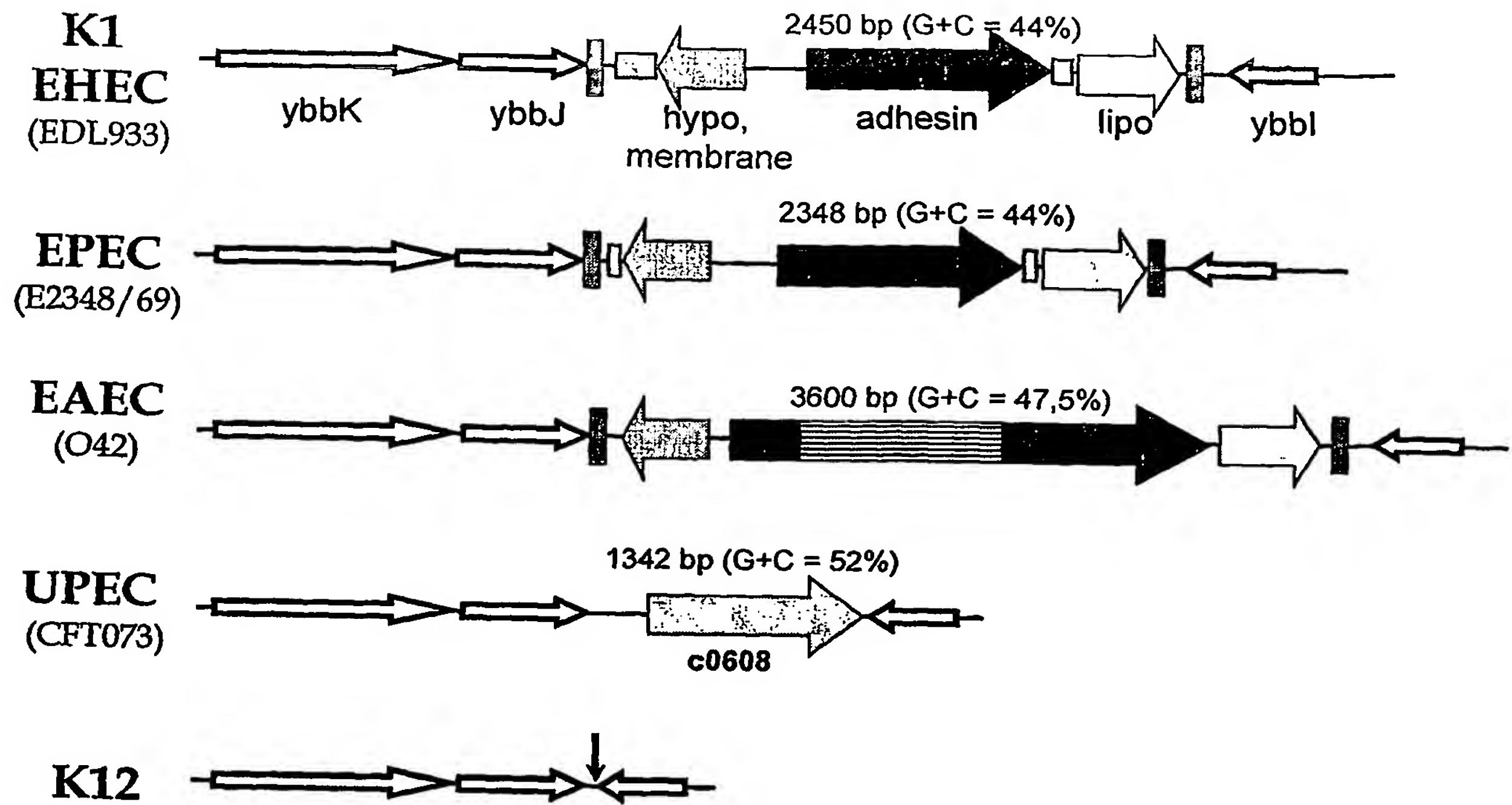
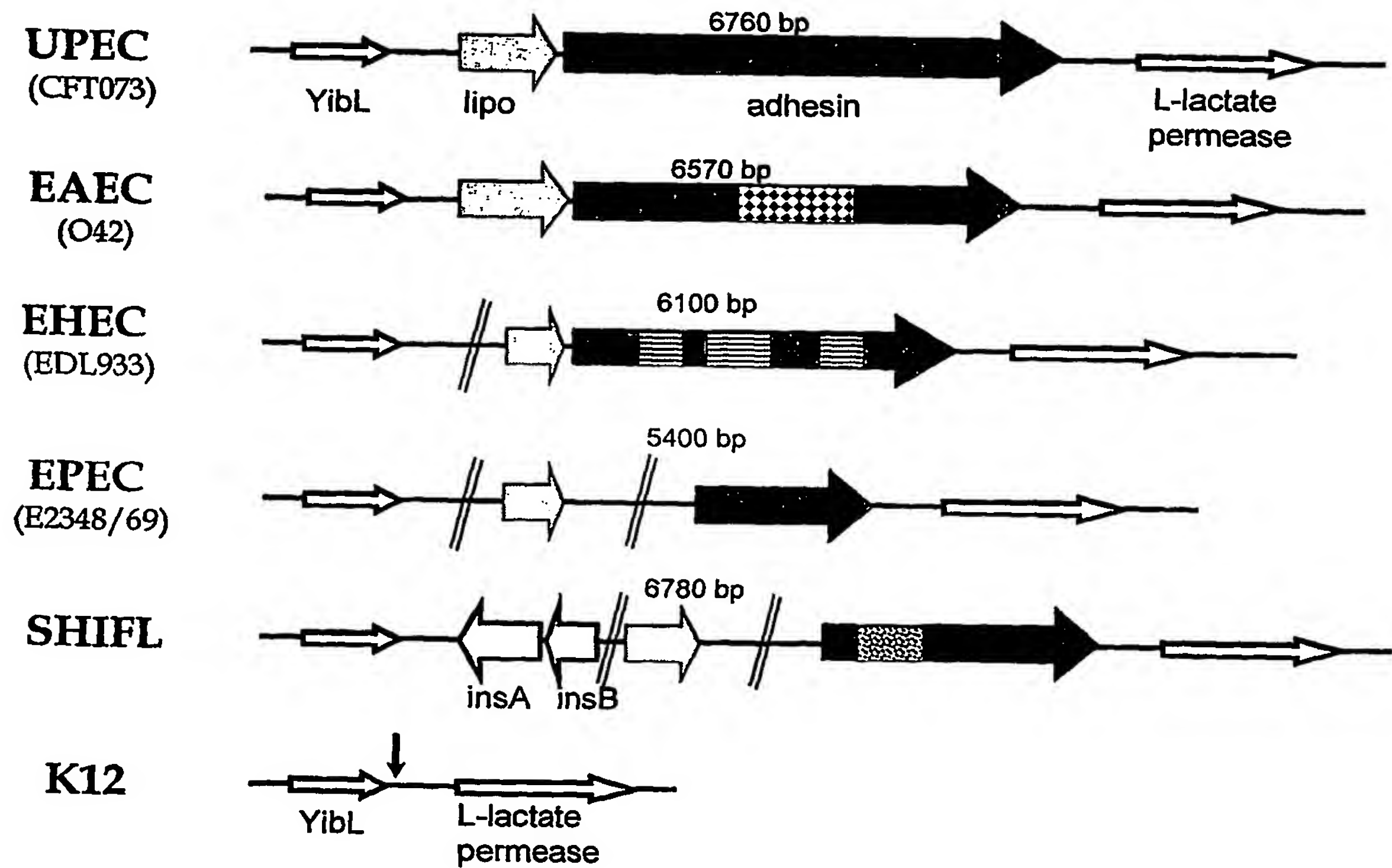


FIGURE 19



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FIGURE 21

FIGURE 21A

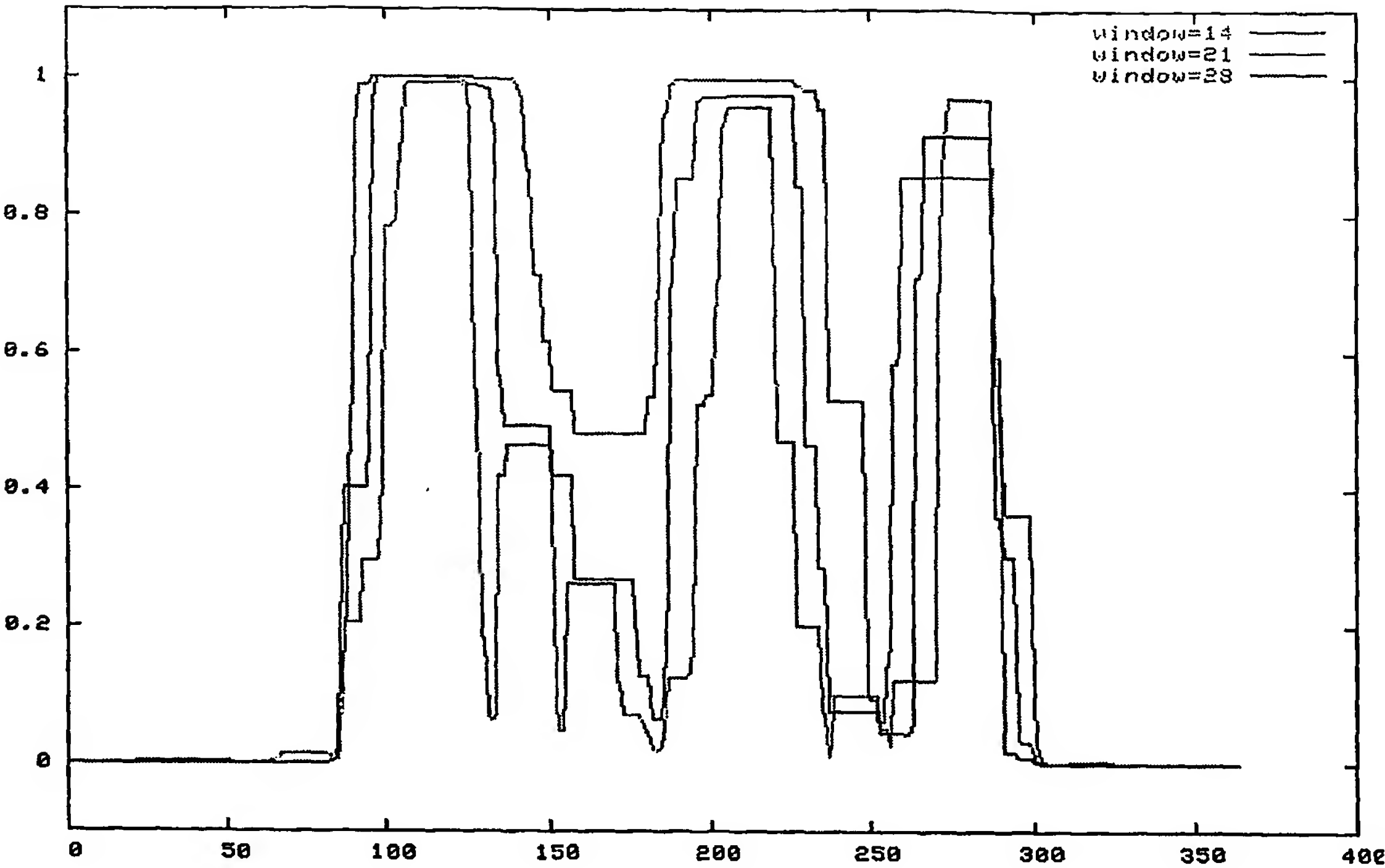
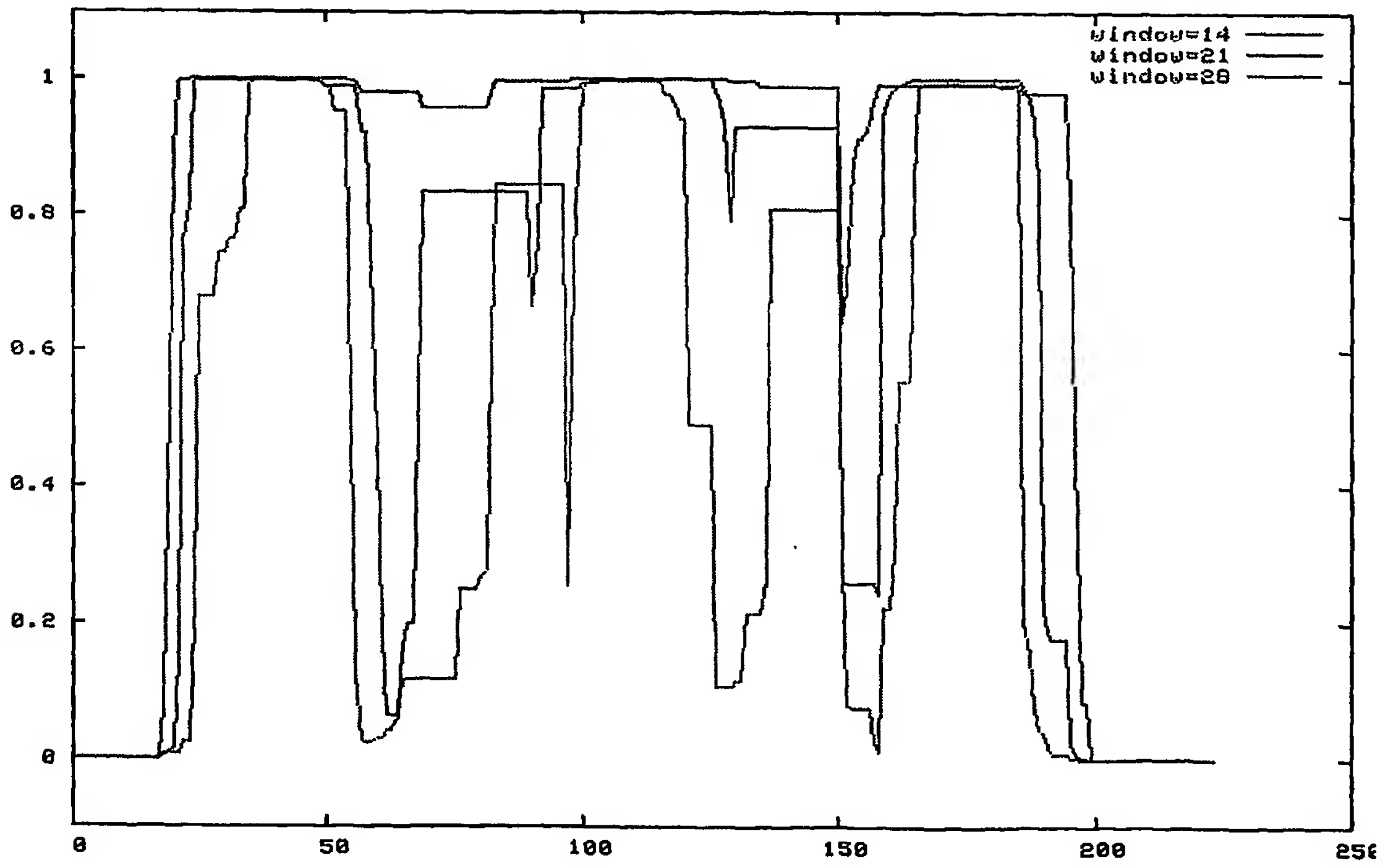


FIGURE 21B



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FIGURE 22

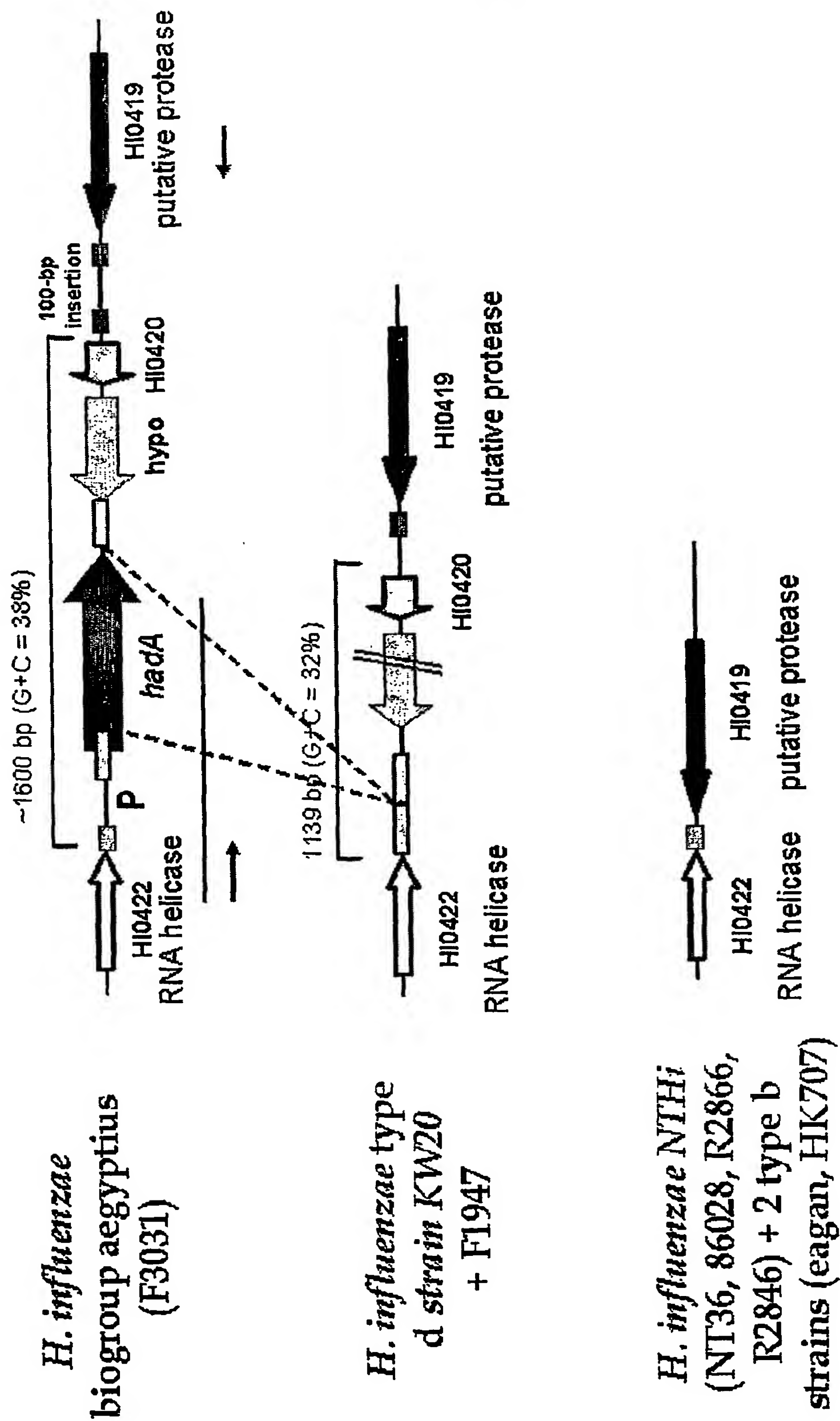


FIGURE 23

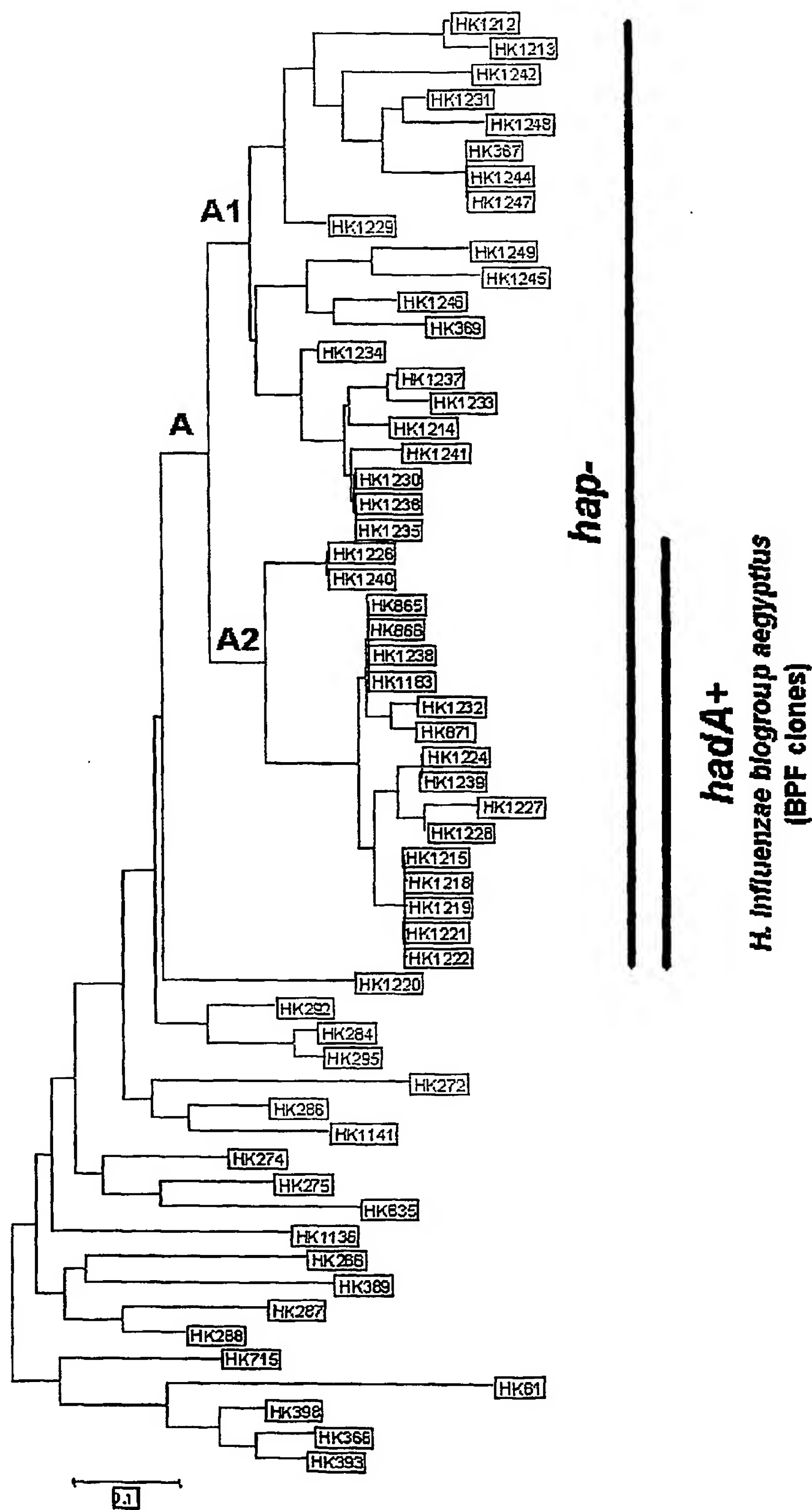


FIGURE 24

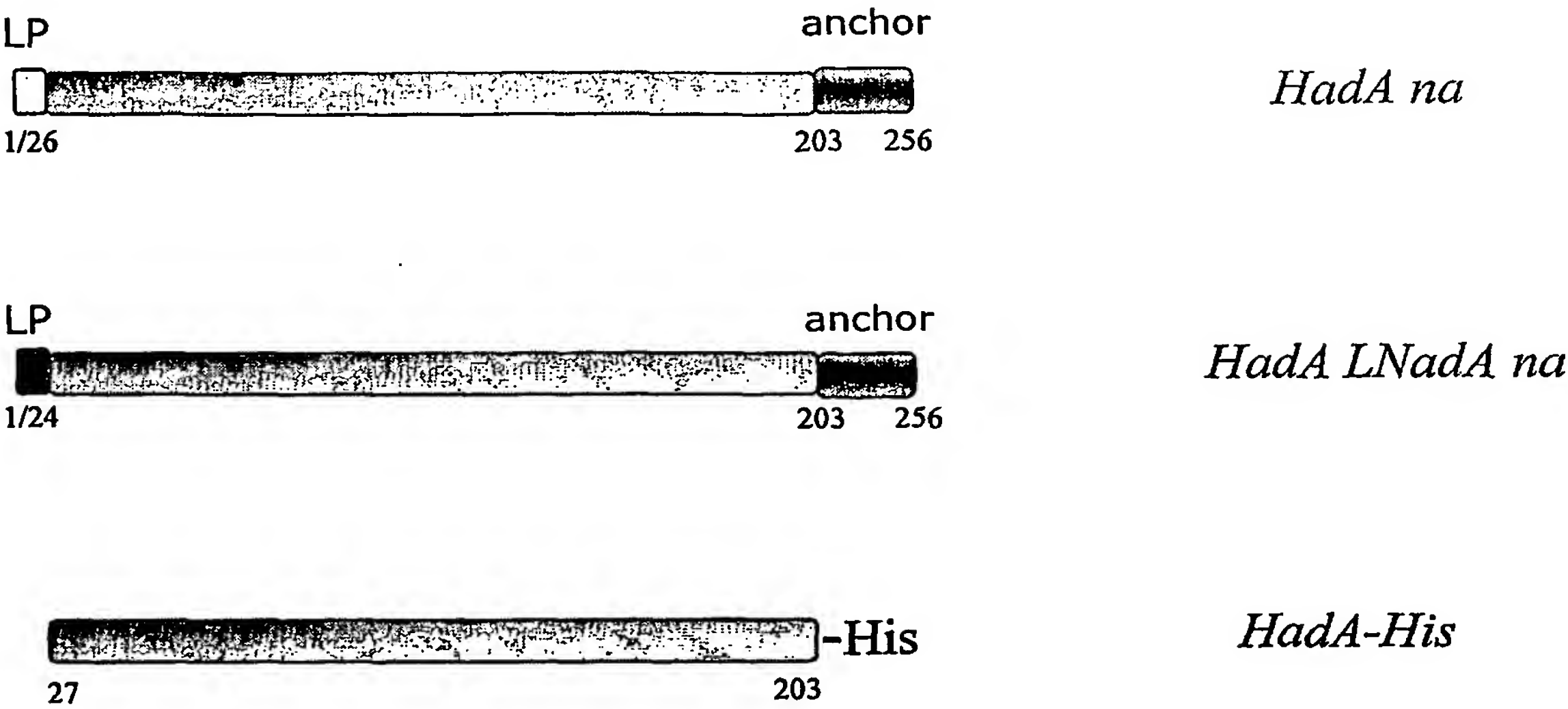


FIGURE 25

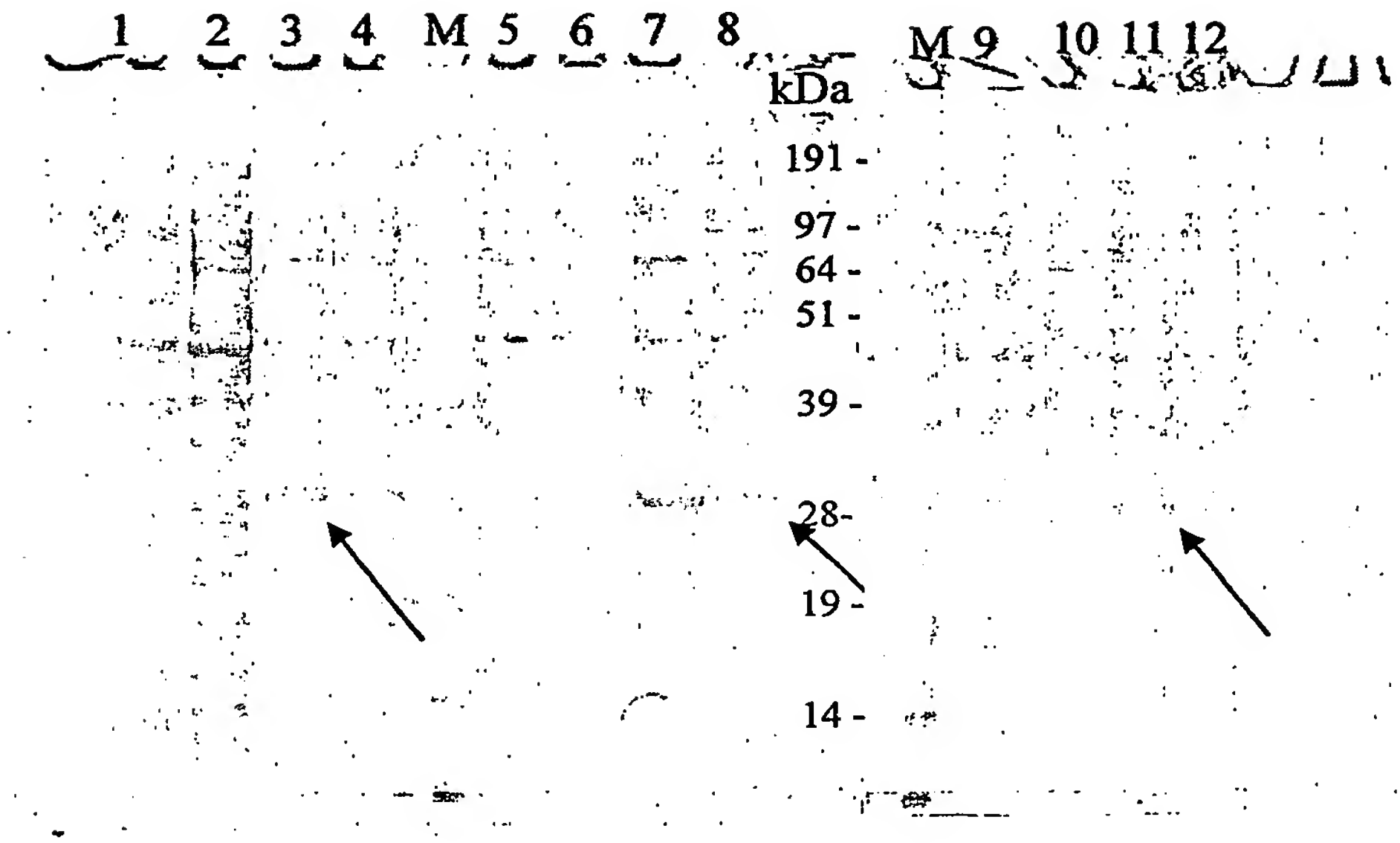


FIGURE 26

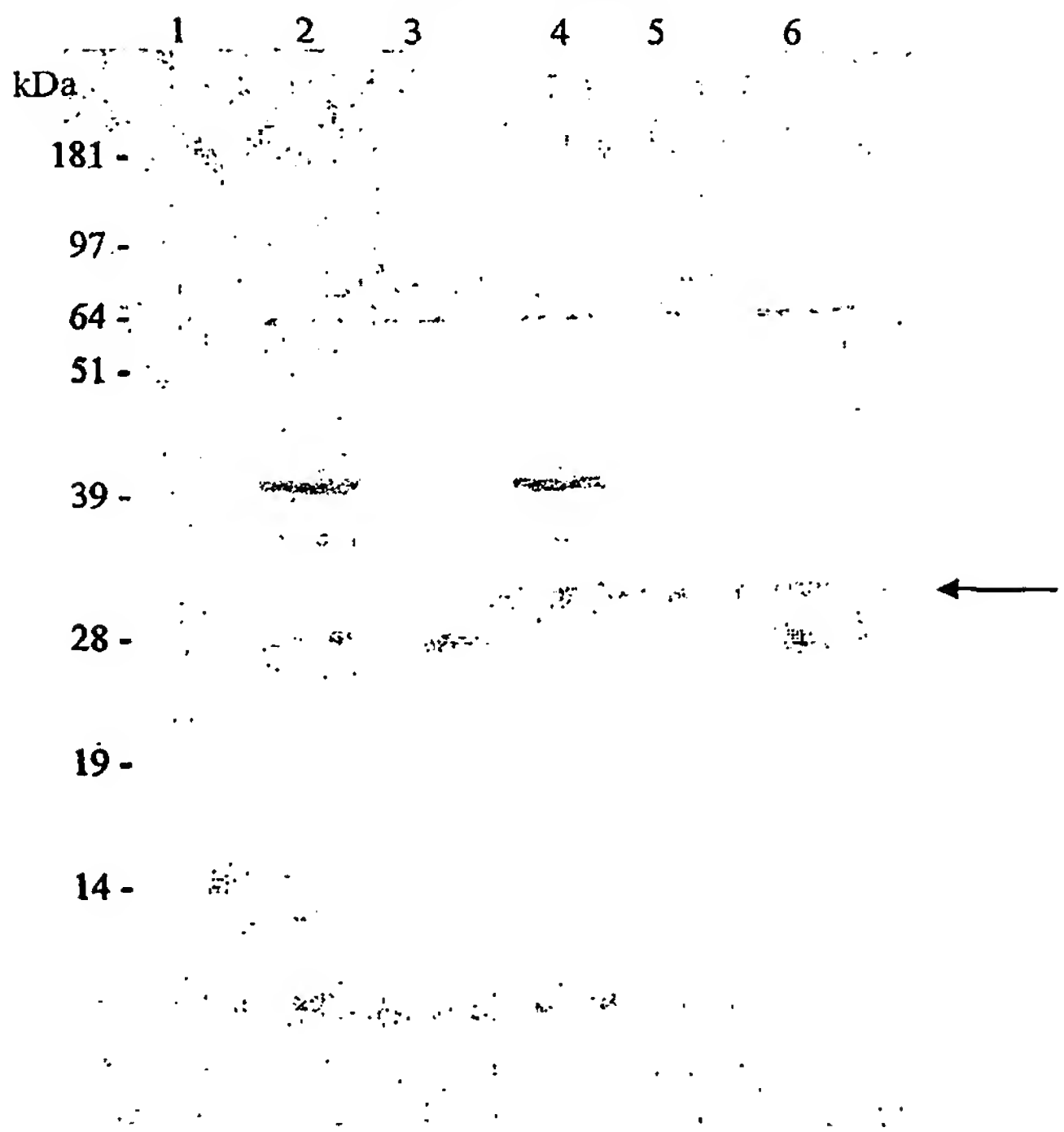


FIGURE 29

FIGURE 29A

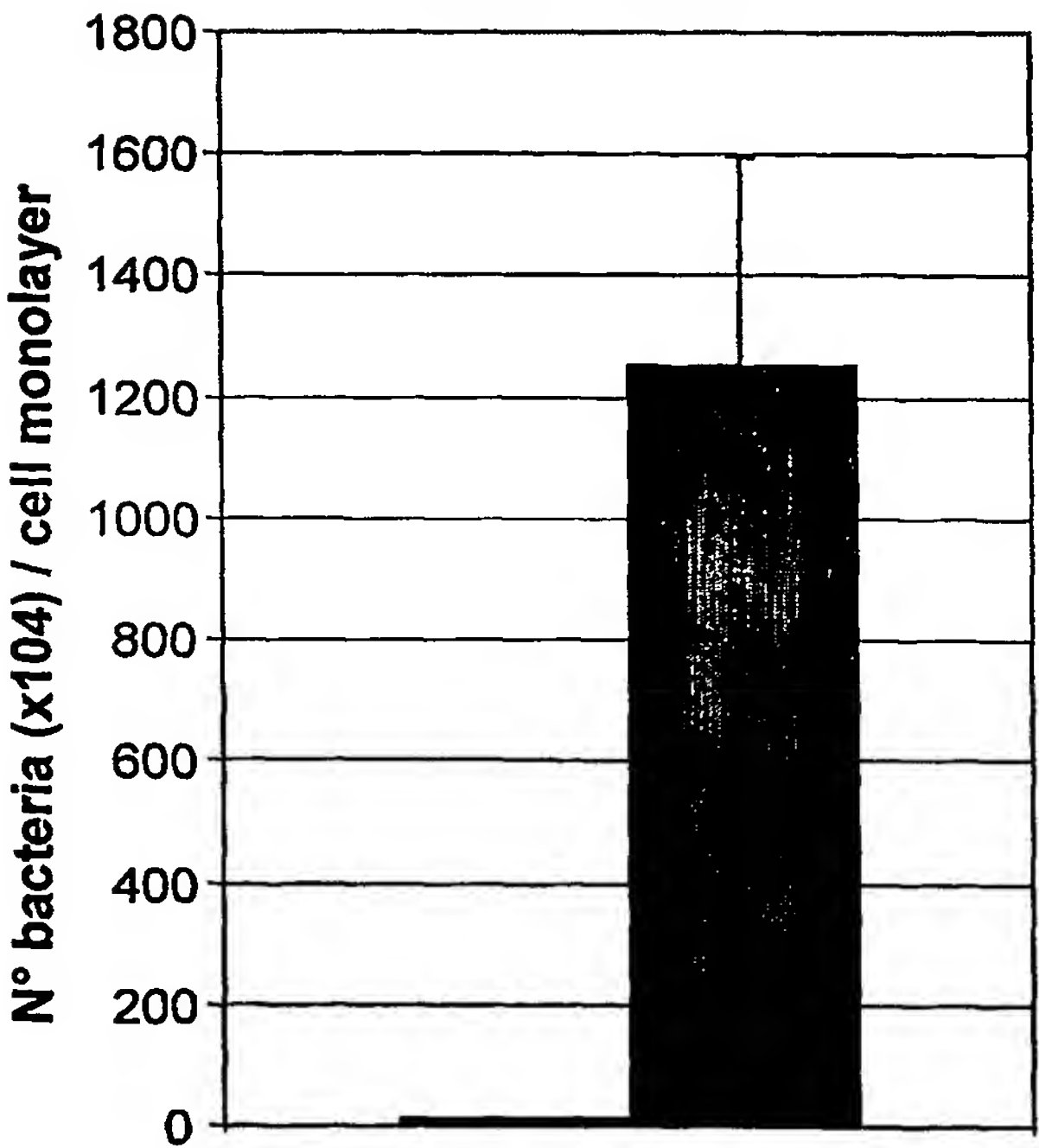
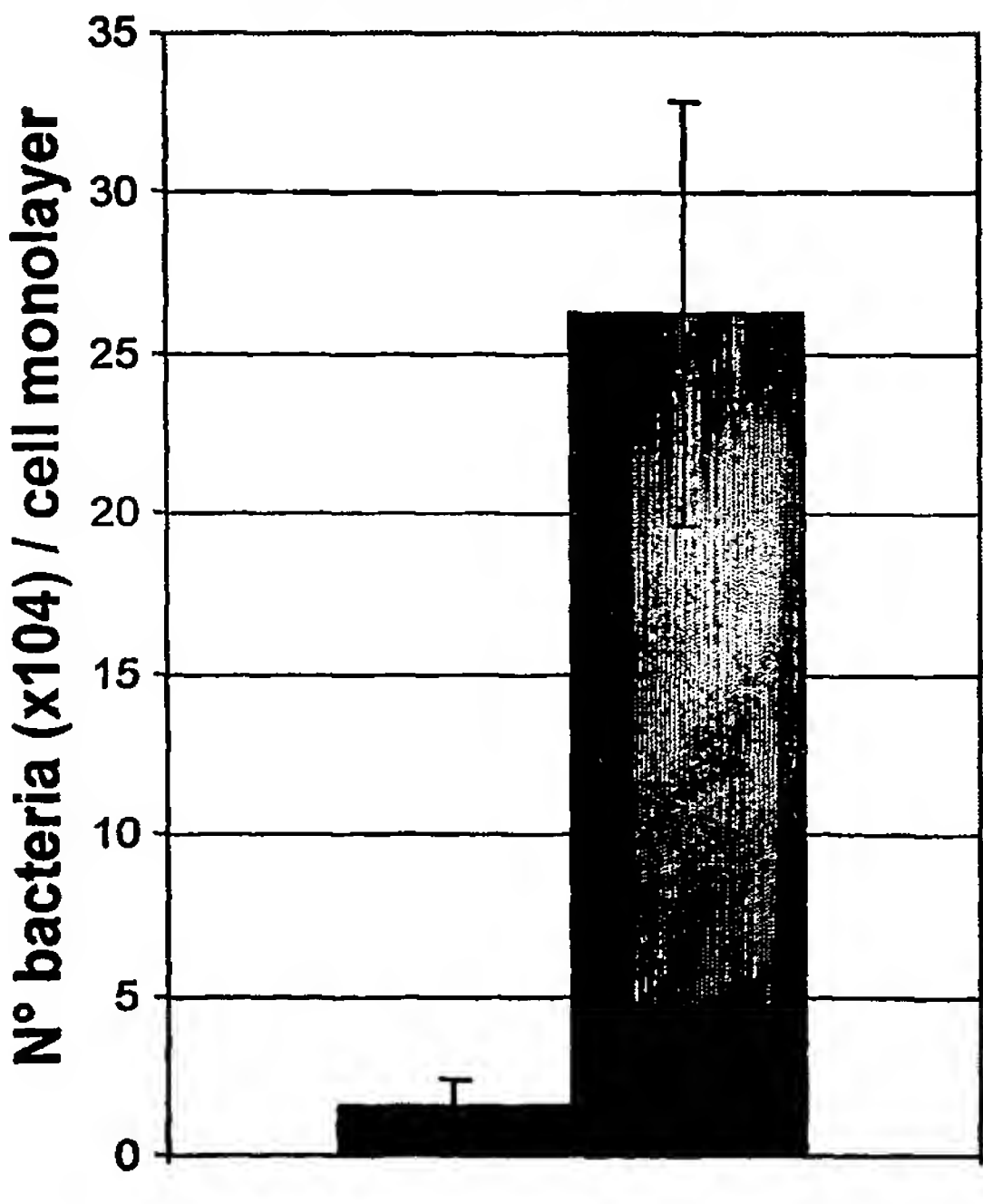
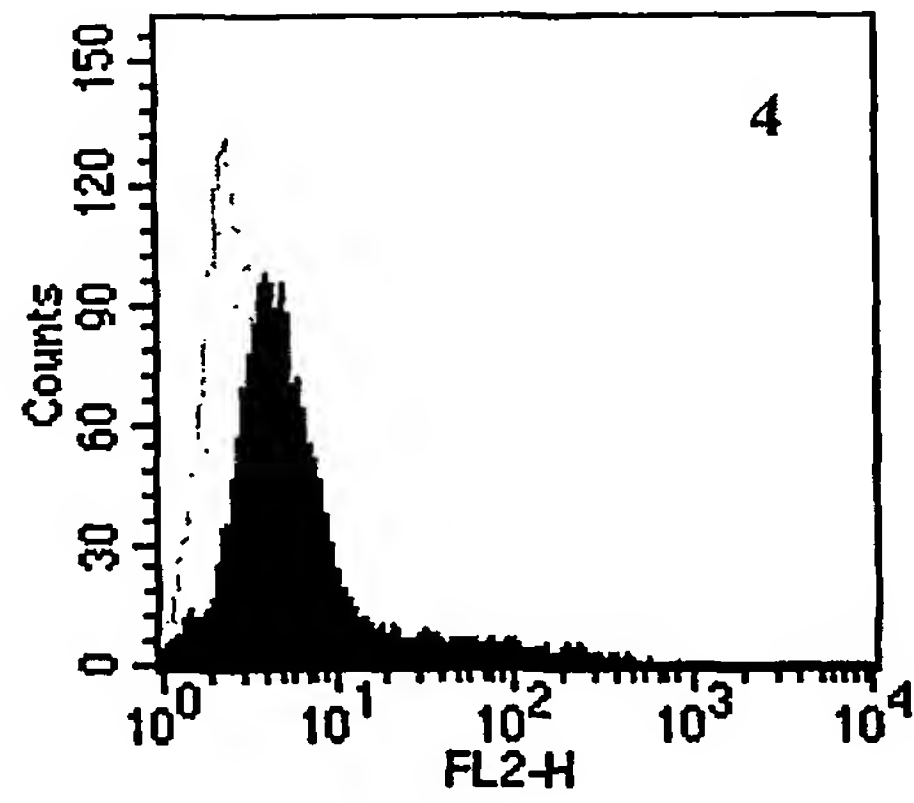
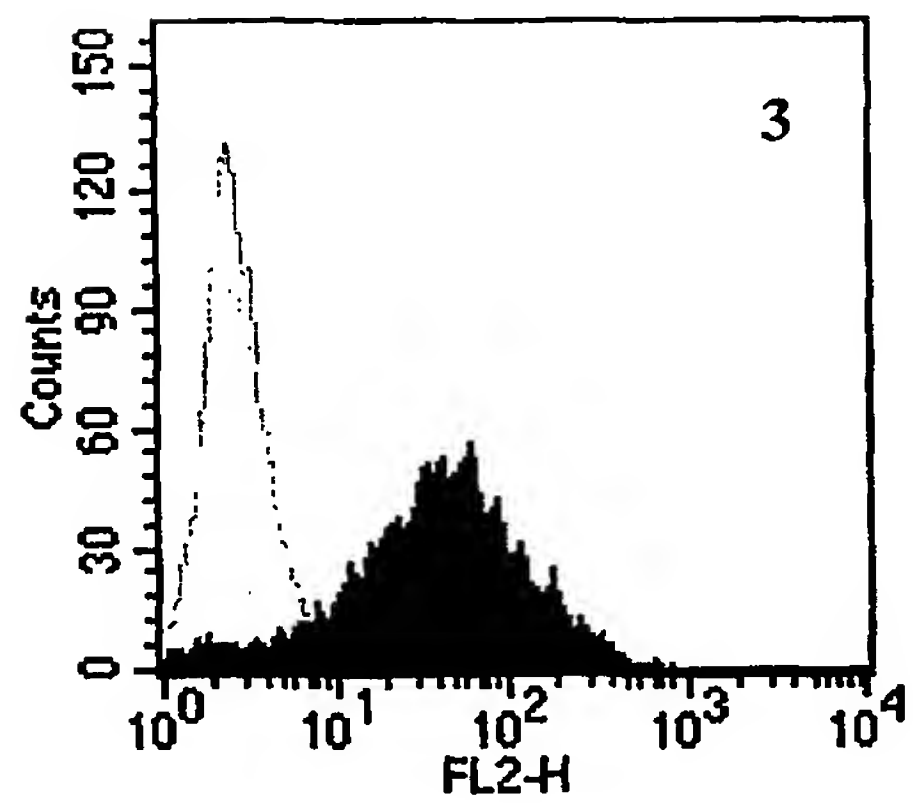
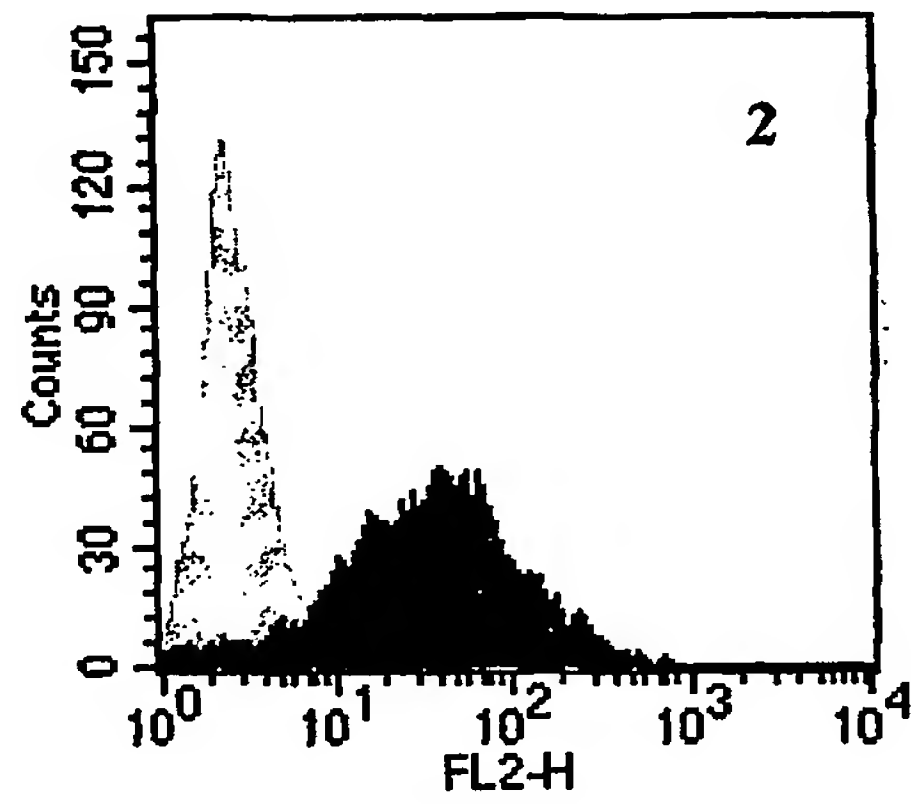
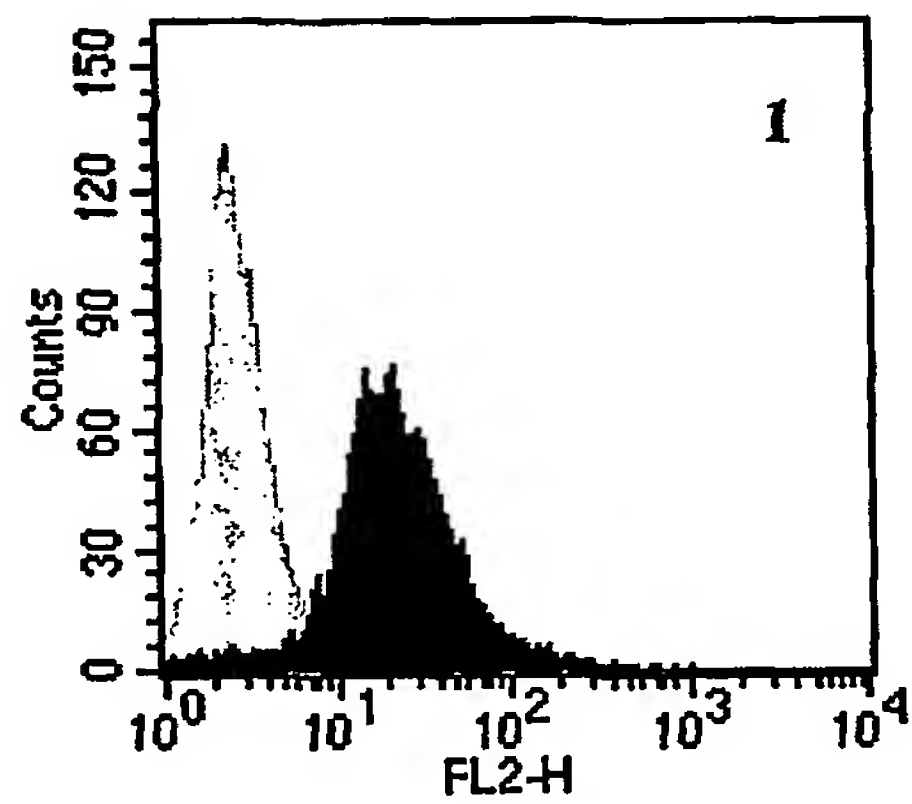
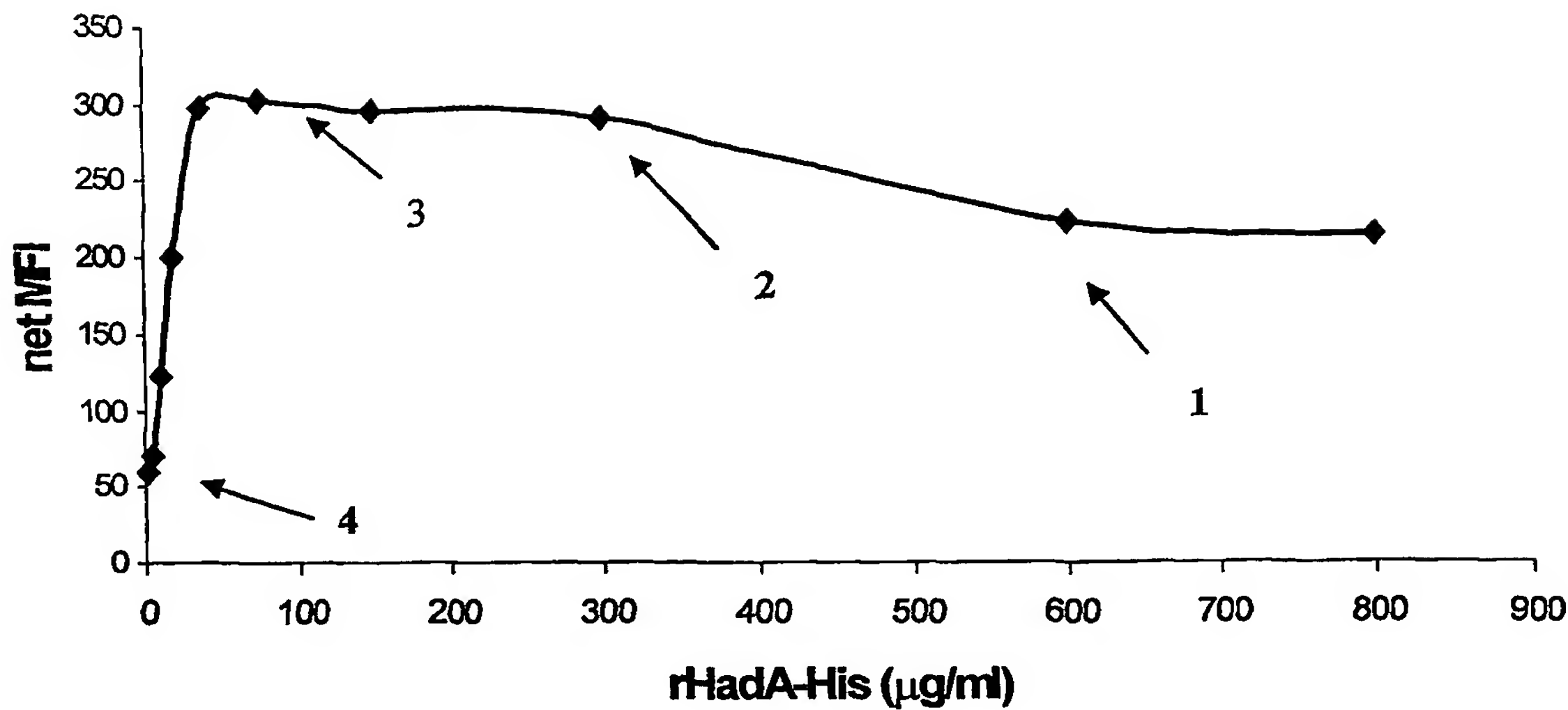


FIGURE 29B



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FIGURE 27





**FIGURE 28**

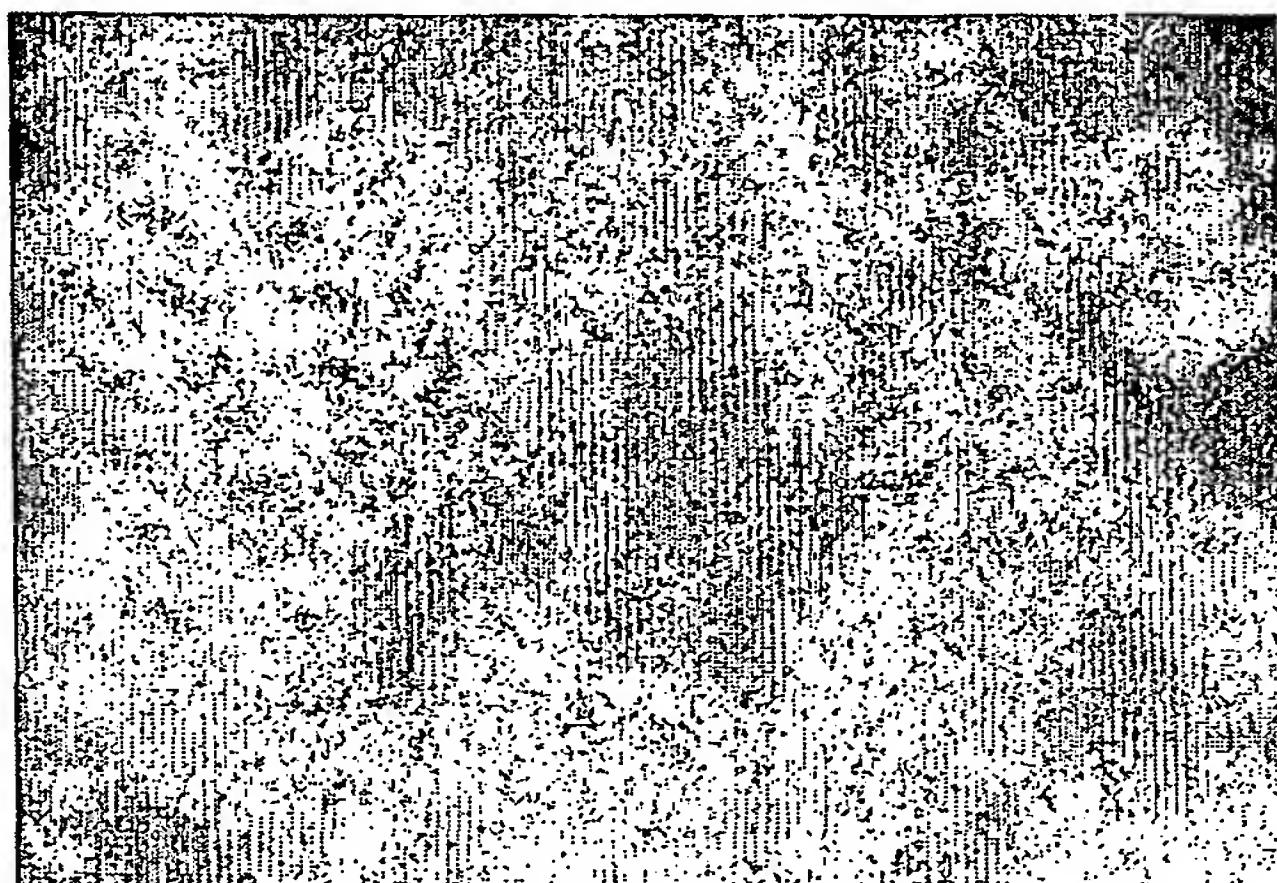
**FIGURE 28A**



**FIGURE 28B**



**FIGURE 28C**



**FIGURE 28D**



**FIGURE 30**

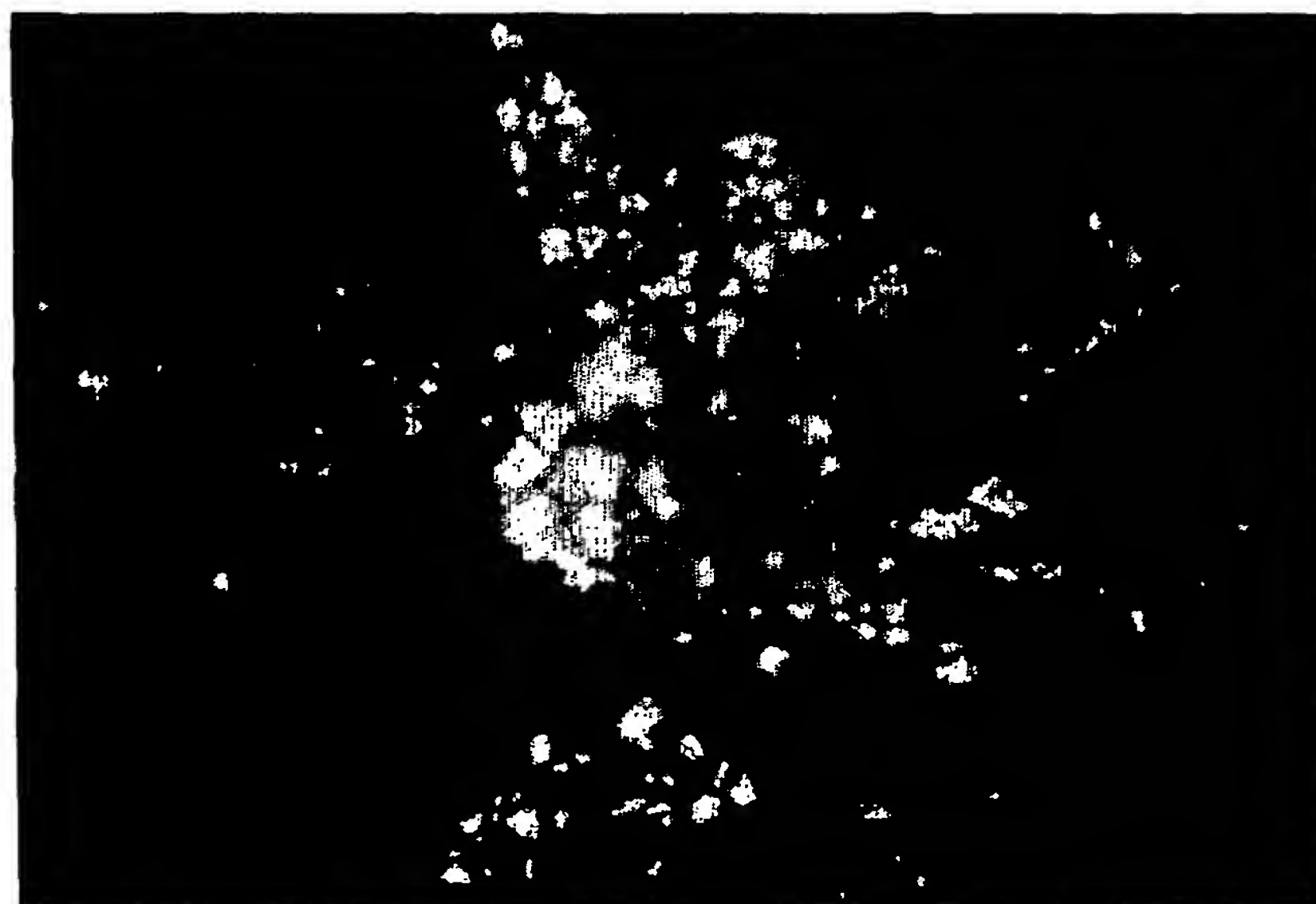


FIGURE 31

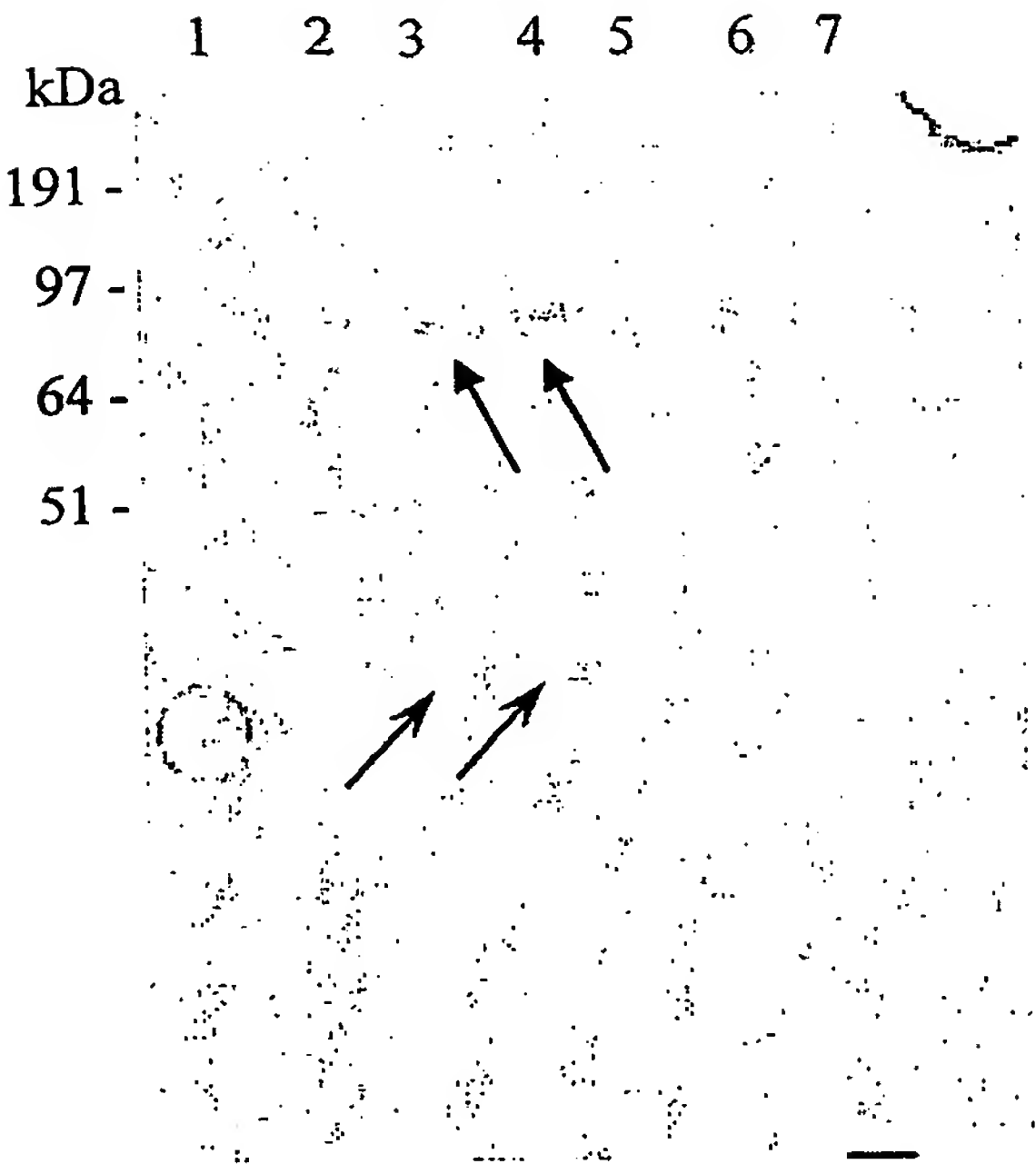


FIGURE 32

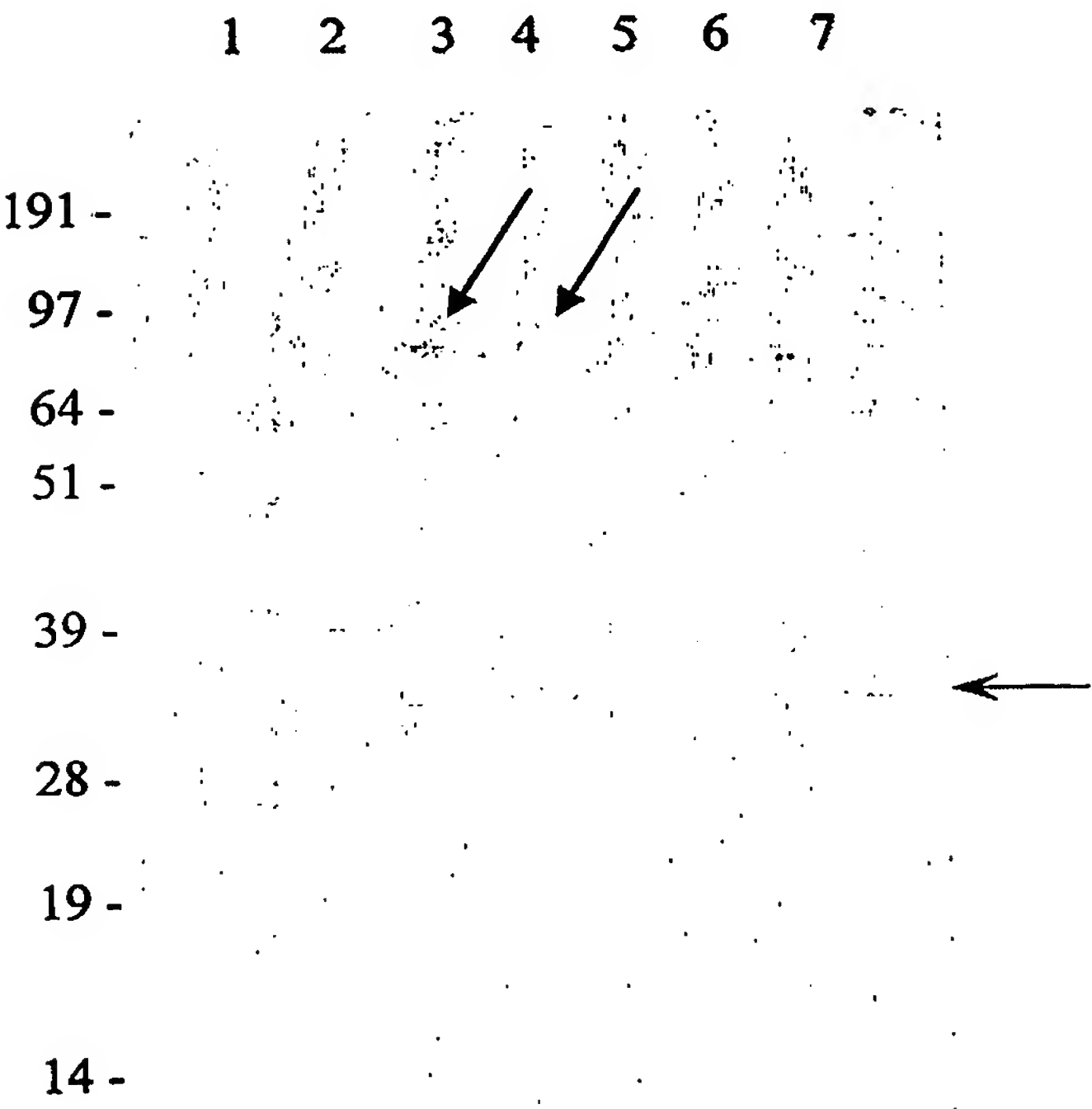


FIGURE 33

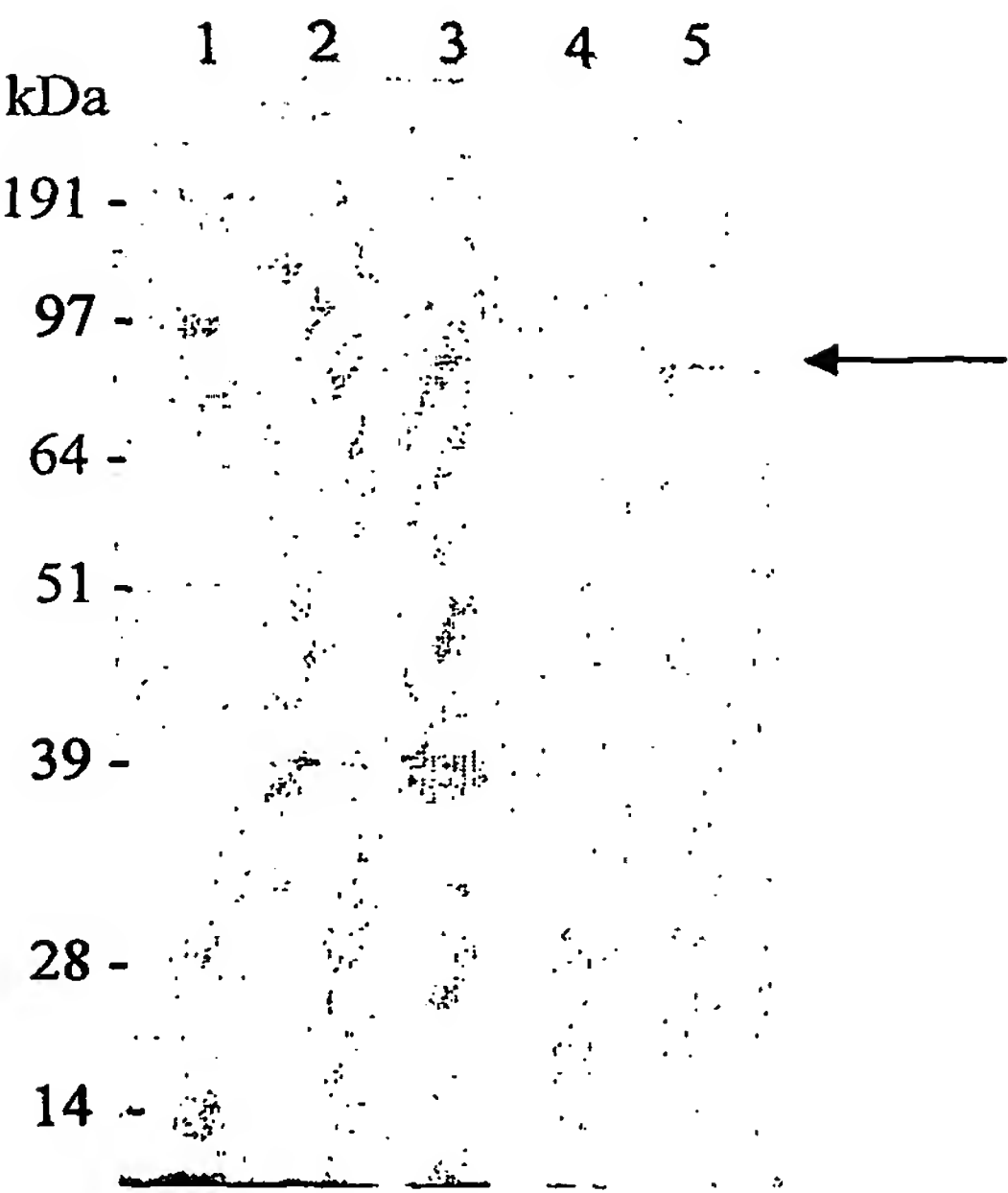
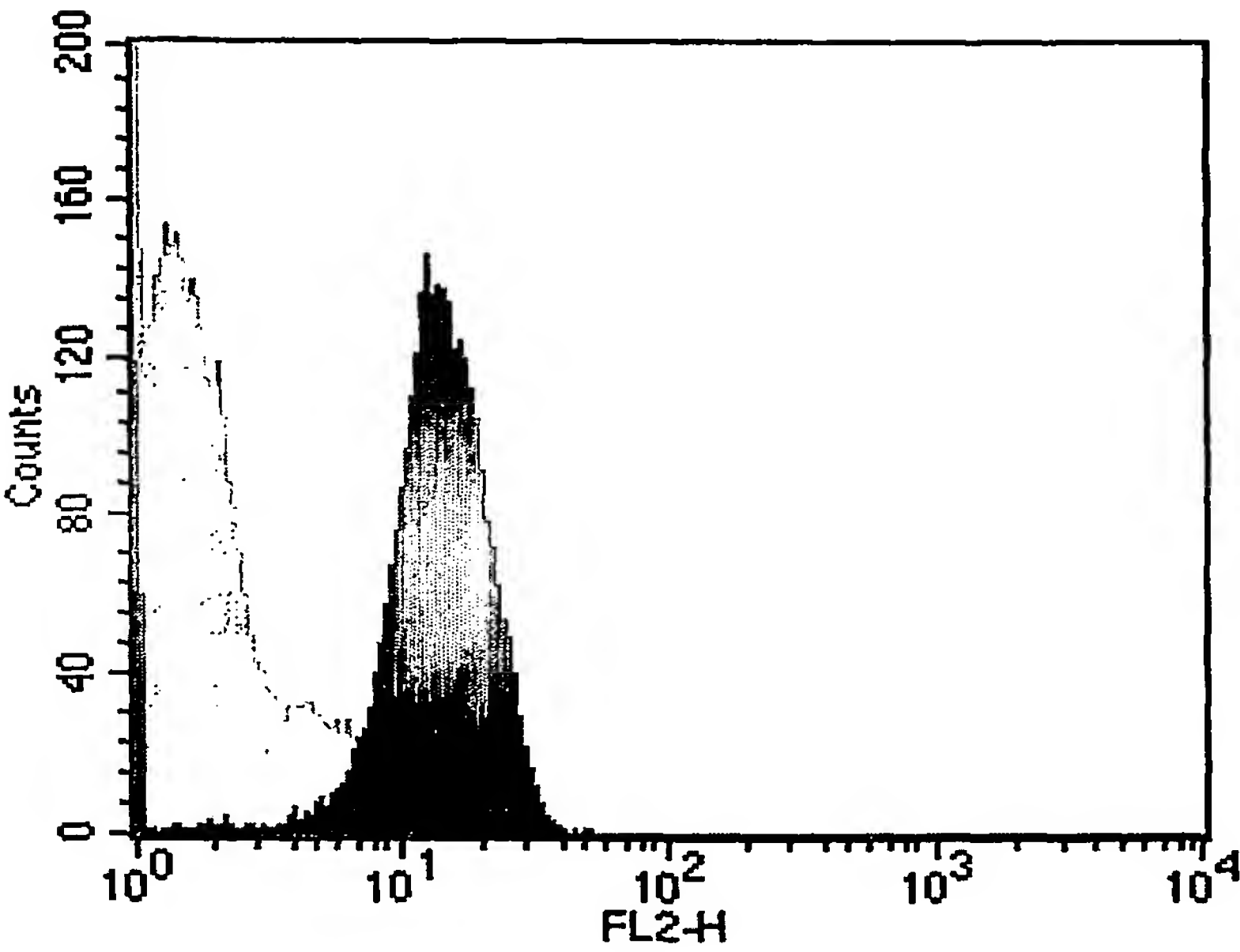


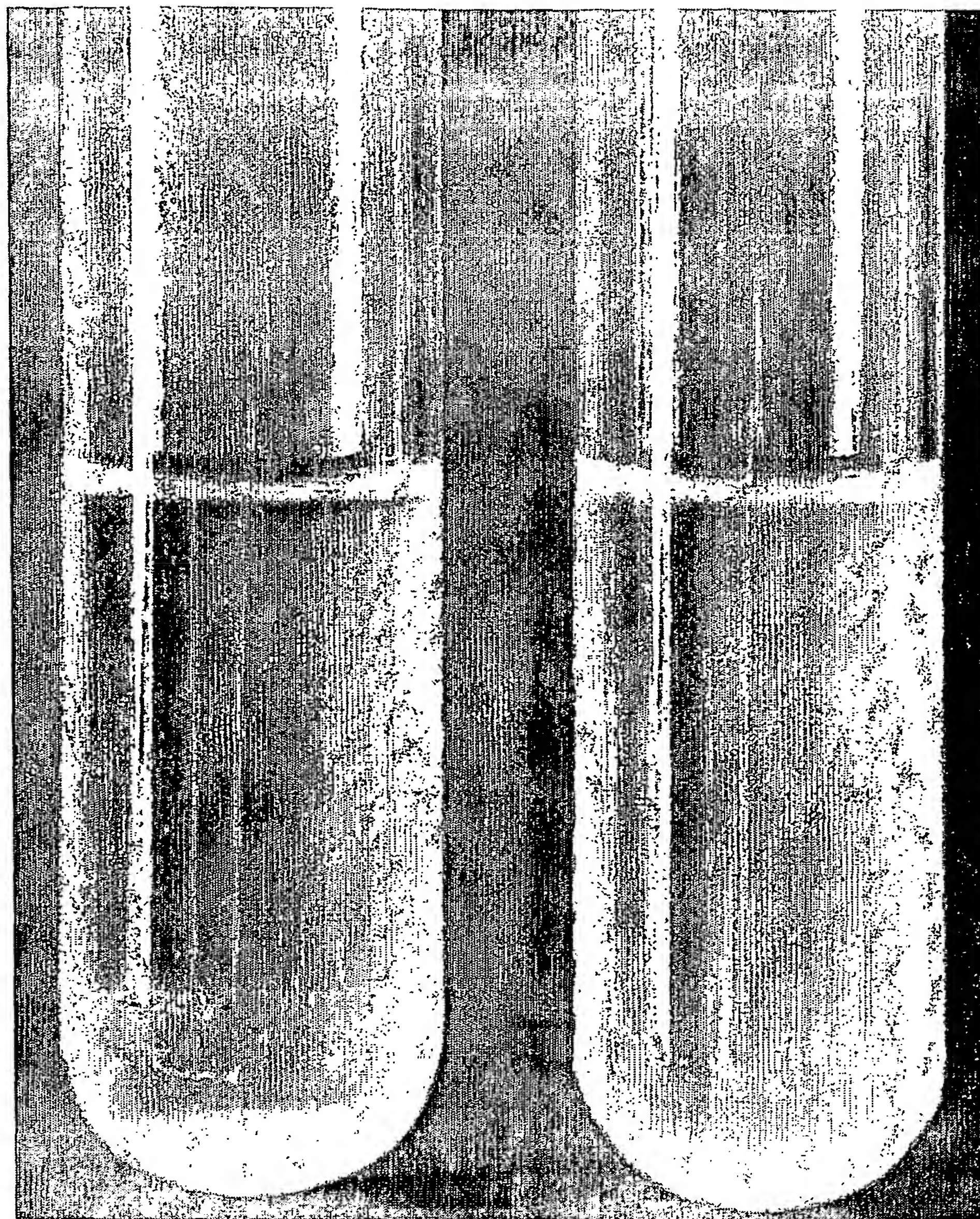
FIGURE 34





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**FIGURE 35**



**HadA<sup>+</sup>**

**HadA<sup>-</sup>**

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